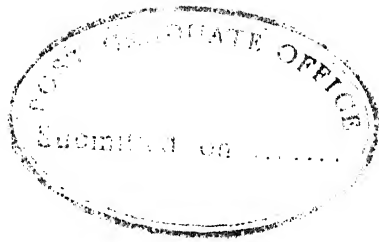# QUALITY OF INTERACTION IN LEADER - MEMBER DYADS:
MEASUREMENT, ANTECEDENTS, AND CONSEQUENCES

A Thesis Submitted

in Partial Fulfilment of the Requirements
for the Degree of

DOCTOR OF PHILOSOPHY

by

KANIKA TANDON

to the

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

INDIAN INSTITUTE OF TECHNOLOGY KANPUR

November, 1990

CERTIFICATE

It is certified that the work contained in the thesis entitled, "**Quality of Interaction in Leader-Member Dyads: Measurement, Antecedents, and Consequences**" by Kanika Tandon, has been carried out under my supervision and that the work has not been submitted elsewhere for a degree.

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Degree for which Submitted: Ph.D.   Department: Humanities and
                                                      Social Sciences

Thesis Title: Quality of Interaction in Leader-Member Dyads:
                   Measurement, Antecedents, and Consequences

Name of Thesis Supervisor: Mahfooz A. Ansari

Month and Year of Thesis Submission: November, 1990

The importance and significance of leadership particularly
in organizations is much recognized. The far reaching and strong
influences of leadership in organizational life too have been
acknowledged.   In line with its importance, the literature in
organizational behavior today is fraught with leadership
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because of the lack of comprehensiveness of different theories.
Almost all the major theories, in their enthusiasm to study
leadership, have overlooked the aspect of followership which is
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explicitly, they all focus on the subordinates as a collectivity.
That is, all the subordinates under a leader are treated as a
homogeneous group, who receive an average treatment from their
leader and who respond collectively.

As a reaction to this averaging tendency of the earlier
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IN-Group members come to collaborate with the leader on unstructured tasks through the process of role development.

The data for the present work was collected through two studies conducted at two different times. 4 organizations with a total of 219 respondents constituted the sample in Study 1. For Study 2 data were collected only from one organization with a total of 122 respondents.

The present work had three broad objectives. The first was to develop a construct through which the interaction between a leader and individual subordinates can be measured. The major aim was to develop a scale that measures the quality of interaction, once this quality is well defined, and that has the potential to be evaluated from both the leader and the member perspectives. Thus, a scale consisting of two dimensions—Perceived Contribution and Affect— was developed. The scale documented strong reliability and validity evidence. A test for the levels showed that the members in a work-group had significantly different quality of interaction with their leader. Also, it was established that the perception of quality of interaction in a dyad (of a leader and a member) shows congruence—that is, the leader and the member generally perceive the same quality of interaction with each other.

The second objective was to identify the major antecedents that might lead to a particular quality of interaction. The antecedents were identified as the interaction of variables related to the leaders and the members; the aim was to test the

compatibility of the two. Three major sets of antecedents were hypothesized to influence the quality of interaction. An attempt was made to incorporate only those variables that are shown to be stable over a period of time, as this was a cross-sectional study. The first set of antecedents was the interaction of the personal attributes (Power, Achievement and Independence Orientations) of the two. This interaction was hypothesized to predict the quality of interactions from both the leader and the member perspectives. The results did not show any significant interaction effects either for the leaders or for the subordinates. The next set of antecedents were the leadership orientations. The leaders identified their own leadership styles (in terms of Authoritarian, Participative, and Nurturant-task) and the members evaluated their preference for these styles. A match between one style (of the leader) and the preference for the same (of the members) was hypothesized to significantly predict the quality of interaction for the members. Though the interactions of authoritarian and participative orientations yielded significant results, nurturant-task did not. Finally, as the third set of interactions, the members' personal orientations and their climate perceptions jointly were hypothesized to predict their (members') quality of interaction. The results confirmed the hypothesis. In essence, the climate that the leader sets for the members to work in, along with their (members') personal orientations is a predictor of the members' quality of interaction. Also, it is not only the leaders'

leadership styles that affect the work-group dynamics, the members' orientations towards these styles too significantly affect the work-group functioning.

Finally, the last objective of the study was to see how this quality of interaction predicts some outcomes. At the first step, the influence tactics used by the two--the leader and the member--were seen as a function of their quality of interaction. Five strategies--Informal External Support, Ingratiation, Personalized Exchanges, Persuasion, and Reasoning--were used both by the leaders and the members. However, the leaders used two additional strategies--Assertion and Showing Expertise-- to influence their subordinates. The quality of interaction of both the leaders and the members predicted the use of influence tactics by both of them to influence each other. Further, the individual scores of the quality of interaction were better predictors of the influence tactics than the group scores. At the second step, some of the members' outcomes--Satisfaction, Commitment, Intent to Leave, and Unit Effectiveness--were hypothesized to be a function of their quality of exchange. Though the members' intent to leave and their perception of unit effectiveness could not be predicted, satisfaction and commitment were predicted by the quality of interaction.

In essence, the study establishes that the unit under a leader is not a homogeneous entity; instead, it is differentiated. Factors related to both the leaders and the members together determine the quality of interaction. These

antecedent conditions can be taken as contingency variables. The results have implications for both the researchers and practitioners. Researchers can identify the effective and pathological antecedents and incorporate the Indian social values and nature of exchanges in the Indian context. This can be an important input to leadership training and development programs.

TO

MY PARENTS

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Chapter 5 QUALITY OF INTERACTION: SOME ANTECEDENTS

Leadership is a vital and significant part of organizational life. The importance of leadership is much recognized, and the literature in organizational behavior is replete with leadership research. There have been many theorizations to explain the phenomenon, but all the major theories have focused on the leader, only treating the work-group of subordinates as a homogeneous, one entity. Consequently, the responses of the subordinates are averaged for the work-group. As a reaction to the averaging tendency of these theorists, the Vertical Dyadic Linkage (VDL) model was developed, which focuses on leader-member dyads as the appropriate unit of analysis.

This volume centres around the theme of "interaction in leader-member dyads." The VDL theorists claim that the quality of exchanges between a leader and different members varies in the work-group. The first aim of the work was to develop a "quality of interaction" measure and to see whether it varies within a work-group. The second objective was to identify the antecedent conditions that lead to a particular quality of interaction. The third objective was to see the consequences of this quality of interaction.

Accordingly, the present volume is divided into seven chapters. The first chapter contains introduction and a review of the literature. The chapter contains three major parts. The first part reviews the other approaches and their average

assumptions. In the second part, a review of VDL is presented. A proposed model for the present volume is given in the third part.

Chapter 2 contains the methodological details. The first part of the chapter contains details of study 1--research site, participants, and the measures used. The second part contains the same details of study 2.

The analytical strategies used in the present volume are discussed in Chapter 3. The average-dyadic controversy is the controversy of level at which leadership should be studied. Within and Between Analysis (WABA) is given in the first part of the chapter to resolve this controversy. The other three parts contain a very brief outline of ANOVA, Hierarchical Regression, and Stepwise Regression.

In Chapter 4, the details of scale development are given. After presenting a review of the previous scales in the first part of the chapter, the statistical properties of the newly developed scale are given in the second part. In the last part of the chapter, the level of the scale is established.

The antecedent conditions are discussed in Chapter 5. Three major antecedent interactions are discussed in the three parts of this chapter. Part one contains the interaction of the personal attributes of the leader and the member--the background, hypotheses, and results and discussion. Parts two and three contain the same details of the interaction of leadership orientations and the interaction of personal attributes with climate, respectively.

The third objective of evaluating outcomes is discussed in Chapter 6. The first part contains the use of influence strategies to influence each other (leader and member) as outcomes of their quality of interaction. Part two contains the outcomes, like satisfaction, commitment etc. of the members.

Finally, the results are summarized in Chapter 7. The Indian social mien and the Indian value system are given due importance while suggesting the implications of the two survey findings.

typing.

Finally, I am thankful to the top executives of the organizations for permitting me to collect the data, and to the respondents for sharing their world-views. Without their help this work would have been an impossibility.

November, 1990   Kanika Tandon

Page

A	=	Assertion
AF	=	Affect
ALS	=	Average Leadership Style
ANOVA	=	Analysis of Variance
AT	=	Attention
CA	=	Achievement (climate) Orientation
CE	=	Chief Executive
C En	=	Chief Engineers
CI	=	Independence (climate) Orientation
CO	=	Commitment
CP	=	Power (climate) Orientation
E->P	=	Effort->Performance Expectancy
ES	=	Extrinsic Satisfaction
F	=	Authoritarian
GM	=	General Manager
Gr	=	Group Scores
I	=	Ingratiation
Id	=	Individual Scores
IE	=	Information Exchange
IES	=	Informal External Support
IL	=	Intent to Leave
IN	=	Influence Strategies
IS	=	Intrinsic Satisfaction
LBDQ	=	Leader Behavior Description Questionnaire

LCA	=	Leaders' Climate--Achievement
LCI	=	Leaders' Climate--Independence
LCP	=	Leaders' Climate--Power
LNL	=	Leaders' Negotiating Latitude
LMX	=	Leader-Member Exchange
LOQ	=	Leader Opinion Questionnaire
LPC	=	Least Preferred Coworker
LS	=	Leadership Style
LT	=	Latitude
$\underline{M}$	=	Mean
MCA	=	Members' Climate--Achievement
MCI	=	Members' Climate--Independence
MCP	=	Members' Climate--Power
MD	=	Managing Director
MNL	=	Members' Negotiating Latitude
N	=	Nurturant Task
$\underline{N}$	=	Number of Cases
$\underline{n}$	=	Number of Cases in Subgroups
NL	=	Negotiating Latitude
NSE	=	Noncontractual Social Exchange
OC	=	Organizational Climate
OSU	=	Ohio State University
OUT	=	Other Outcome Variables
$\underline{p}$	=	Probability level
P	=	Participative
p.	=	Page

PP.	=	Pages
PA	=	Achievement (Personal) Orientation
PA1	=	Principal Factoring Without Iteration
PA2	=	Principal Factoring With Iteration
PC	=	Perceived Contribution
PE	=	Personalized Exchange
PI	=	Independence (Personal) Orientation
PO	=	Personal Orientations
P->O	=	Performance->Outcome Expectancy
PP	=	Power (Personal) Orientation
PR	=	Persuasion
Q Ex	=	Quality of Exchange
QI	=	Quality of Interaction
r	=	Correlation
R	=	Reasoning
R	=	Multiple Regression
SA	=	Satisfaction
SD	=	Standard Deviation
SE	=	Showing Expertise
SP	=	Leadership Style Preference
UE	=	Unit Effectiveness
U.K.	=	United Kingdom
VDL	=	Vertical Dyadic Linkage
WABA	=	Within- And-Between Analysis

Chapter 1

_____

An Overview

The fundamental aim of this chapter is to present the major leadership theorizations. The chapter has been organized into three parts. A careful examination of the voluminous literature would reveal two distinctly different approaches to the study of leadership--(i) the leader treating the members of his or her group as a homogeneous lot and (ii) the leader maintaining a unique relationship with each of his or her members--although both approaches are geared toward attaining the same organizational objectives.

The first part specifically deals with the Average Leadership Style formulations. The theories are so called because of two reasons. First, if they focus on leader behavior or trait, it is assumed to be consistent or same for all the subordinates. Secondly, if the focus is on variables predicted by the leadership theorization, they are usually in terms of the members (e.g., satisfaction, commitment, productivity, etc.) but averaged for the work group. Because of this averaging tendency, they are called the Average Leadership Styles (ALS). The first section of this part contains the conceptualizations of leadership and the second section contains various models that implicitly make the average assumption.

The second part of the chapter deals with an alternative approach that emphasizes the dyadic interactions between a leader and a member. After presenting the conceptualization of the Vertical Dyadic Linkage (VDL) approach in the first section of this part, the theoretical bases of the conceptualization are delineated in the second section. Then, a review of empirical research conducted for this theorization is provided in the third section.

Finally, the third part of the chapter contains broadly sketched objectives of the present work. The objectives are: (i) to develop a scale to measure quality of interaction, (ii) to evaluate leader and member personal needs/leadership orientations and climate perceptions as determinants of the quality of interaction; and, (iii) to study some consequences of the quality of interaction.

LEADERSHIP: THE ALS APPROACH
Conceptualizations

The relevance and centrality of leadership in organizations has been widely emphasized and rightly so. The fact becomes more evident when it is asserted that, in most cases, the failure of the new organizations right at the start is because of poor leadership (Schultz, 1982). Therefore, an organization's leaders are a major determinant of it's success or failure (Katz & Kahn, 1978).

Given the importance and pervasiveness of the phenomenon, leadership has received a fair amount of attention from

researchers and practitioners alike. As a result, it has been defined, understood, and explained in various ways. One reason for the far reaching effects of leadership is probably it's multifaceted nature. This also has led the researchers to define the phenomenon in terms of their perspective and focus of interest.

A brief introduction to the various conceptualizations will indicate the many faces of the concept touched upon. All such conceptualizations are taken that have led to theoretical formulations. If one were to look for a grass-root identification, it is a group phenomenon which involves interaction between two or more people (Janda, 1960).

One of the earliest conceptualizations of the concept was in terms of people. This assumed that some people were leaders but others were not. This led to the use of personality characteristics or <u>traits</u> as the differentiating factor between the leaders and the non-leaders. It could be anything from the strength of a particular trait (Bowden, 1926) to the presence of a number of desirable traits (Bingham, 1927). The average nature of the conceptualization becomes more evident when leaders with particular traits are considered efficient, if they evoke "collective response" from a group (Bernard, 1926). This conceptualization will be taken up in detail under the subhead of Trait Theories.

Another aspect of leadership, which has generated a lot of interest and consequently a flood of research, is leader's acts

or <u>behavior</u>. In this view, leadership behavior may involve directing the activities of the group (Hemphill, 1949) or making the followers work towards a common goal (Shartle, 1956). They could be any acts designated or enumerated by experts (Carter, 1953). In the context of organizations, in particular, a behavioral definition representative of most theorizations is as follows:

> By leadership behavior we generally mean the particular acts in which the leader engages in the course of directing and coordinating the work of his group members. This may involve such acts as structuring the work relations, praising or criticizing group members, and showing consideration for their welfare and feelings (Fiedler, 1967, p. 36).

Although these definitions focus on different aspects of leader behavior, the underlying emphasis is on the group. The activities of the group are important and so is leader behavior towards the group. The theories with this focus are treated under the subhead of Behavioral Theories.

Yet another aspect which has gained a wide popularity in recent times is the situation in which the phenomenon occurs. It has been suggested that the behaviors or traits of leaders are considered effective in terms of the situations (Westberg, 1931). Thus, leadership is a confluence of three elements--personality traits, the nature of the group members, and the nature of the event the group is faced with. Bass (1960) is also of the view that some of the variance in leadership research is due to the individual and some due to the situation. Basically, this understanding of leadership is an extension of trait or behavior

theories.   The essence is that the leader behaviors or traits
cannot be conceptualized in vacuum;   situations provide the   much
needed backdrop (Bass, 1981).

Thus far, the conceptualizations have focused on   the
elements of individuals or environment in understanding the
concept of leadership. Another way of understanding could be in
terms of focusing on the phenomenon itself. This will lead to
process oriented definitions.   Thus, for some, leadership is the
art of inducing compliance.   The   thrust   here   is   on
unidirectional, single-handed exertion of influence.   In this
light, it is "social control" (Allport, 1924) and "force of
morale" (Munson, 1921).   It is a phenomenon characterized with
"inducing others to do what one wants them to do" (Bundel, 1930).
This conceptualization does not even recognize the necessities
and sensitivities of the group members. As a result, it smacks
of overemphasis on authoritarian dimension of leadership (Bass,
1980).

The emphasis thus shifts to influence which is more general
and less value-laden. In this framework, leadership is the
"interpersonal influence exercised in a situation and directed
through the communication process toward the attainment of a
specified goal or goals" (Tannenbaum, Weschler, & Massarik, 1961,
p. 24). More generally, it is an "influence process whereby O's
(leader's) actions change P's (follower's) behavior and P's
views, the influence attempt as being legitimate and the change

as being consistent" (Kochan, Schmidt, & DeCotiis, 1975, p. 285).
Stressing the importance of referent power, Katz and Kahn (1978)
define leadership as the "influential increment over and above
mechanical compliance with the routine directives of the
organization" (p. 528).

A cognitive approach to the phenomenon would emphasize
perceptual and cognitive aspects of the process. This might
focus on attribution processes (e.g., Calder, 1977; Pfeffer,
1977) in leader perceptions, the subordinates' implicit theories
of their leaders (e.g., Bernardin & Alvares, 1975; Ilgen & Fujii,
1976), or the problem solving skills of the leader (e.g., Lord,
1976; Newell & Simon, 1972).

More directly, process-oriented formulations view leadership
as an interaction process (e.g., Anderson, 1940; Pigors, 1935).
This, for some theorists, means a form of an exchange wherein the
group members make a contribution to the group at a cost to
themselves and receive returns at a cost to the group (Gergen,
1969; Homans, 1958; March & Simon, 1958; Thibaut & Kelley, 1959).

Yet another shift in the focus leads to understanding
leadership as roles. It is a differentiated (uplifted) role in a
group (Jennings, 1944).

These definitions are discussed here because they were
developed in the ALS framework. The VDL conceptualization begins
with the definition of Katz and Kahn (1978). Then it explains
leadership development through the exchange processes involved in
the role development by members. This is discussed in detail in

the second section of part two in this chapter.

Next, we go on to see various models and present their average assumptions.

Models

The multifaceted nature of leadership has not only led to various conceptualizations but also to various theorizations. It follows from the discussion on conceptualizations that, broadly, there are two ways of studying leadership. One approach would focus essentially on the elements of individuals and environment to identify effective leadership. The other would focus on the process of leadership. Consequently, the two are, respectively, termed the "elemental" and the "process oriented" theories. This does not mean that one aspect is emphasized to the exclusion of the other. The classification is based only on the emphasis laid on one aspect in the theorizations.

Elemental Theories

This section, by definition, will include all such theorizations that identify elements of effective leadership. The universalistic (normative) and the situationally-determined contingencies are the representative approaches of this kind.

Universalist Approaches

This set of theorists emphasize on the normativeness—that is, superiority of one behavior or trait to another in predicting leadership. Leadership effectiveness is sought to be understood in terms of variables related to the leader completely overlooking the importance of the situation. Universalists have identified these variables in terms of leader traits and behaviors.

Trait Approaches. These are the earliest approaches based on the assumption that some people were born leaders. This means that there are some personality characteristics or traits that differentiate a leader from others. If they are traits, they are relatively fixed with no scope for flexibility or development. In this approach, all researchers aim at identifying these characterstics. The identification could be done by evaluating effective leaders. The growth and development of trait approach was influenced by the emphasis on psychological testing from 1920 to 1950. Since most of the tests were aimed at identifying personality characteristics or intelligence, they added impetus to trait research.

Thus started a search for identifying biographical, personal, emotional, physical, and intellectual traits of leaders. For example, leaders were found to be taller and heavier (Gowin, 1915) and physically smarter (Patridge, 1934) than non-leaders. The list of traits is endless and these are only a few of the many factors that are shown to play a vital

role. Byrd (1940) analyzed trait research upto 1940 and reported that only 5% of the traits identified in any one study were common to four or more studies.

Stogdill, in his 1948 review, discovered that a host of traits had been identified by the researchers. He clubbed the different traits into five categories. These categories were: capacity, achievement, responsibility, participation, and status. Along with these, he also identified the sixth dimension of situation.

Thus, he (Stogdill, 1948, p. 64) concluded:

> A person does not become a leader by virtue of the possession of some combination of traits, ... the pattern of the personal characteristics of the leader must bear some relevant relationship with the characteristics, activities and goals of the followers.

The results disheartened most of the general theorists. But after World War I the growth of testing emphasized on selecting right people in the organizational settings. Stogdill (1974), in yet another review, cited 163 studies, most of which were conducted in organizations. He found a relatively more consistent pattern in this analysis. This should not be taken to mean that trait approach is relevant for organizational settings but not for others. This was so probably because researchers had learnt a lesson from the previous reviews and they were more systematic in delineating the traits.

Although Stogdill (1974) encouraged the researchers to pursue trait approach, but not in isolation, they were to be studied in conjunction with the situation.

Needless to mention, there is no scope for leader-member dyadic relationships, as traits are more or less fixed. If the leaders are endowed with certain personality characteristics, they obviously have the same impact on all the followers in a work-group.

Behavioral Approaches. This set of theorists focus on the acts or behaviors of the leader. The question in this approach shifts to "what leaders do." Research has been directed at identifying leader behaviors on the job. The actions of the leaders are variously termed as "activity patterns", "managerial roles", or "behavior category." The aim is to identify such behaviors that differentiate between effective and ineffective leaders. Following are a few representative behavioral theories.

AUTHORITARIAN-DEMOCRATIC DICHOTOMY. Lewin, Lippitt, and White (1939) conducted an experimental study. Their aim was to investigate the effects of climates created by different leadership behaviors on the attitudinal and behavioral outcomes for the members. Twenty eleven-year old boys were divided into four groups, with five boys in each group. These groups were called clubs, and they were matched on personal and sociometric dimensions. Four adults were trained to enact the leadership roles (authoritarian, democratic, and laissez-faire). These adults were rotated in such a way that each club experienced all the three leadership styles. Before we proceed to discuss the outcomes for the group, a brief description of the three styles is in order.

The <u>authoritarian</u> leader made all the decisions single-handedly and had full control over the activities of the members. Consequently, members did not have any knowledge of what they had to do in the future and were totally dependent on the leader for this. The leader decided the nature of the job and work companion for every member. Finally, the leader was personal in praising or criticizing the members. The leader did not participate in the group activities and remained aloof.

The <u>democratic</u> leader, on the other extreme, was more open and participative. The policies were decided on the basis of group discussion. Only the general instructions about work were given to the members. The members had freedom in deciding how they did their job. They decided on the kind of job and their work companion. The leader was more factual and objective while criticizing or praising the members.

The <u>laissez-faire</u> style was characterized by apathetic leadership. Leader's participation in the group activities was minimal. The material for working was provided and information was given only when asked for by the members.

The findings of the Lewin et al. (1939) study can be summarized as follows. In the authoritarian condition, the members were more dependent on their leader and were more dissatisfied with the activities of the group. The interactions between the group members were marked with aggression and irritability. Although the group produced a lot, the quality of the output was only average. In the democratic leadership condition, on the other hand, members were less dependent on the leader and were more satisfied with the group activities. Their interactions were devoid of aggression or irritability. The amount produced though was only average, the output was of high quality. Also members in this group showed more "we" feelings than "I" feelings. The production was least in the laissez-faire

group.

The results of later studies were mixed with respect to outcomes. However, satisfaction of the group members has almost always been found higher for democratic than for autocratic leaders.

This classification of autocratic and democratic leadership falls directly in the average category. Not only the leader behavior but also the outcome variables are averaged for the group. Additionally, the two dimensions of leader behavior form two discrete categories. Next, we take up a formulation that treats the behavior categories as orthogonal.

OHIO STATE LEADERSHIP STUDIES. A series of studies were initiated in 1945 by the Bureau of Business Research under the headship of C.L. Shartle. After the not-so-success story of the trait approach, an attempt was made to identify relevant leader behaviors. This theorization is more directly relevant to organizational settings.

The first objective of this effort was, of course, to unearth the various leader behaviors. In the first phase of the research, a questionnaire was to be developed. Beginning with 1,800 examples of leader behavior, the identification boiled down to 150 items that were contained in the Leader Behavior Description Questionnaire (LBDQ). The responses on these items were factor analyzed. The analysis showed that the subordinates perceived their leader's behavior in terms of two distinct categories (Fleishman, 1953, 1957; Halpin & Winer, 1957; Hemphill

& Coons, 1957). Subsequently, these two behavior categories were called "Consideration" and "Initiating Structure." They were characterized in the following manner:

> Consideration included behavior items concerned with leader supportiveness, friendliness, consideration, consultation with subordinates, representation of subordinate interests, openness of communication with subordinates and recognition of subordinate contributions.

> Initiating Structure included behavior items concerned with directing subordinates, clarifying subordinate roles, planning, coordinating, problem solving, criticizing poor work and pressurizing subordinates to perform better (Yukl, 1981, p. 106).

Thus, consideration parallels a "relationship" aspect and initiating structure the "work" aspect.

A detailed analysis of the two dimensions revealed that they were factorially independent and distinct. This implied that the two were orthogonal dimensions and that a leader could have any combination of the two. That is, having one kind of behavior did not rule out the possibility of having another.

The LBDQ questionnaire was rated by the leader's subordinates, peers, or superiors. Another attitudinal measure, Leader Opinion Questionnaire (LOQ), was also developed. The LOQ measured leader's own attitudes towards the same two dimensions of behavior.

Studies have been conducted to see the effects of consideration and initiating structure on productivity, satisfaction, and other effectiveness criteria for the group. The results on satisfaction are by far the most consistent. Subordinates have shown more satisfaction with the leader high on

consideration. At the same time, relationship between consideration and various other measures of leader effectiveness varies with the population. The interaction effect of the two leader behaviors has also been reported to be significant in determining the rates of grievances and turnover (Vroom, 1976).

Circularity of causation is one problem that makes these results ambiguous (Yukl, 1981). Moreover, LBDQ measure itself seems to be suffering from "halo effect" (Seeman, 1957), which might affect the prediction of outcomes (Fleishman, 1973). The model is blatantly average. That is, to describe the leader behavior, the responses of the subordinates are averaged to give a unitary leader behavior (Graen & Schiemann, 1978). Outcomes are also measured for the group, not for the individual member.

MICHIGAN LEADERSHIP STUDIES AND THEIR EXTENSIONS. Another major program on leadership research began at the University of Michigan at about the same time the OSU studies were being conducted. The prime objective was to discover leadership behaviors that led to effective performance of the group. At the very outset, the approach takes on the average nature by focusing on group performance. For this purpose, the objective criteria of group productivity were used, as the managers were classified as effective or ineffective depending upon the productivity of the group. Descriptions of the leader behavior were analyzed to differentiate between the effective and ineffective leaders. These studies also identified two dimensions of leader behavior. "Job-centred leadership" paralleled the initiating structure and

"employee-centred leadership" paralleled the consideration dimension of the OSU studies--the former emphasizing the work and the latter emphasizing the interpersonal aspects.

Studies testing the link between effectiveness and leader behavior provided interesting results. Effective leaders indulged more in supervisory behavior like planning and scheduling the work, coordinating subordinate activities, and the like. They were also more considerate, supportive, and helpful. That is to say, leaders high on both the dimensions were found to be more effective (Katz & Kahn, 1952; Katz, Maccoby, & Morse, 1950; Mann & Dent, 1954).

Another series of studies were concerned with evaluating the leader behavior towards subordinates for decision-making processes. The various analyses showed that the effectiveness of a leader was positively correlated with the subordinate participation in decision-making (e.g., Coch & French, 1948; French, 1950).

Rensis Likert (1961, 1967) compiled all the data and results of the Michigan University studies. He identified system IV (the participative style) as the most effective style. Participative style was characterized with three elements--(i) use of supportive relations by the managers, (ii) group decision-making and group methods of supervision, and (iii) high performance goals. From the two recent reviews (Stogdill, 1974; Locke & Schweiger, 1979) on the effectiveness of participative style, it follows that although job satisfaction and group cohesiveness do

correlate positively with participative style, productivity does not.

The obscurity of results may partially be attributed to the psychometrically weak measures (Locke & Schweiger, 1979). Another factor could be the failure to evaluate the outcomes and leader behavior for individual subordinates in dyadic term.

MANAGERIAL GRID. Blake and Mouton (1964) initiated their studies with the two dimensions given by the OSU studies. They popularized the concepts and made extensive use of them in management development programs.

In their formulation, they identified a plane between two orthogonal dimensions of "concern for task" and "concern for people." They identified five cutpoints corresponding to five leadership styles in the plane. This gave rise to a kind of grid, hence the name managerial grid. The five styles are as follows:

Impoverished (1,1)--Low on both the concerns. Minimal effort is expended to get the work done or maintain relationships. Concern is only with maintaining organizational membership.

Country Club (1,9)--High concern for relationship and low concern for task. Prime concern is satisfying the relationships and maintaining a friendly atmosphere.

Task (9,1)--High concern for task and low concern for relationship. Efficiency on work is the prime concern with very little attention towards maintaining relationships.

Middle-of-the-road (5,5)--A moderate concern both for task and for relationship. Adequate work is sought to be done by maintaining the morale of the people.

Team (9,9)--A high concern both for task and for relationship. Tasks jobs are done through committed people.

Blake and Mouton emphasize on the normative use of Team (9,9) style of leadership for effective functioning of the group. They have devised programs that are aimed at developing the managerial style to Team or 9,9 orientation.

COMMENTS. All the behavioral theories described above identify two strickingly clear-cut dimensions of leader behavior--the work and the interpersonal. The theorizations prescribe one effective leadership style. Thus, be it participative leadership (Likert, 1967) or 9,9 management (Blake and Mouton, 1964), emphasis is on developing both the dimensions of task and relationships. There are evidence, all the same, of inconsistency in the same results (e.g., Halpin & Winer, 1957; Likert, 1961). One possible explanation is sought in terms of the situations. That is to say, it is the situational variables that decide the effectiveness of a particular style. This contention has been taken care of in the next subsection.

Another probable reason for the inconsistency in the results is the average assumption. All the theories begin with the assumption of average leader behavior towards the group. They also evaluate the outcomes for the members at the group level. Likert (1967) also goes on to emphasize the effectiveness of "group supervision" and "group decision-making". It is not contended that group leadership is not effective. The objection

is to the a priori assumption of average nature of leadership.

Situationally-Determined Contingencies

Lack of support for one effective or ideal leadership style has led to the inclusion of situational variables in leadership theorization. Different styles have been found to be effective in different situations. The contention of these theories is that the effectiveness of a particular style is contingent upon situations. Following are a few theories of this kind. They focus on different situational aspects.

Fiedler's Contingency Model. In his earlier attempts, Fiedler (1967) was mainly concerned with identifying leadership traits. His large sample then consisted of a variety of leaders. In this pursuit, he identified one motivational dimension which was measured through the Least Preferred Coworker (LPC) scale. He also found that the results lacked consistency, so far as the effectiveness was concerned. This led him to include some situational variables too. Before we go into a discussion of situational variables and Fiedler's recommendations, the meaning of LPC is in order.

In the LPC scale, Fiedler begins with asking the leader to think of a coworker with whom he or she could work least well. Then the leader is asked to evaluate the coworker on an 8-point semantic-differential scale. The scale contains bipolar adjectives (e.g., pleasant-unpleasant; friendly-unfriendly; etc.). The fundamental aim of this scale is to see how the leader evaluates somebody whom he or she had the difficulty to work

with. If the coworker is evaluated less favorably (low LPC), the leader is essentially task oriented. On the other hand, a favorable evaluation (high LPC) indicates relationship orientation of the leader. The meaning and interpretation of LPC has seen ample research. The most recent interpretation (Fiedler, 1971, 1972) views LPC in terms of motive hierarchy. Thus, a low LPC indicates the leader's motivation to get the work done and high LPC means the leader's motivation to maintain relationships. The interpretation is definitely in terms of the link between values and attitude. Rice (1978), in a review, found substantial support for this link. Since the measure is motive-oriented, it is closer to trait and is treated as relatively fixed.

Fiedler (1967) proposes that the connection between LPC score and effectiveness is contingent upon a set of situational variables. He has identified three such situational contingencies. They are presented below in order of their importance.

Leader-Member Relations. This situational variable takes care of members' personal relations with their leader. A favorable situation is characterized by loyalty and support from the subordinates. Consequently, members readily comply with the leader's directions. An unfavorable situation, on the other hand, involves mistrust and antipathy between the leader and the members. The focus is on the leader's relations with the members as a whole-group.

Task Structure. This deals with the nature of the task that the leader and the group face. A favorable situation would mean highly structured and well-defined task. Unstructured tasks are unfavorable because of their nebulous nature.

Position Power.   This is the power inherent in the
position of the leader. High position power enables
the leader to have more control over the group.   The
leader   can use organizational resources to   gain
influence. Low position power gives the leader little
influence over the subordinates.

These three dimensions together with relevant weightages
define the favorability of a situation. If all three are high,
the situation is highly   favorable; if they are low, the
situation is unfavorable.   Fiedler recommends that a   task
oriented leader (low LPC) is more effective for highly favorable
or   unfavorable   situations.   For   situations   of   moderate
favorability, a relationship oriented leader (high LPC) is more
effective.

The testing of the model has received extensive research.
There is evidence both in favor of (e.g., Chemers & Skryzpek,
1972) and against (e.g., Graen, Orris, & Alvares, 1971) the
model. However, different reviews by Fiedler and his associates
show considerable support for the theory (e.g., Fiedler, 1971,
1973).

Researchers have pointed out drawbacks in the theorization.
First of all, the meaning of LPC has changed several times since
it's conceptualization, and present interpretation is only
speculative (Schriesheim & Kerr, 1976). The model does not give
a rationale for its predictions (Ashour, 1973).   Only task
structure is a truly situational variable.   The situational
variables are not totally uncorrelated with the LPC measure (Kerr
& Harlan, 1973).

Since LPC is more like a trait, it is not variable and hence does not provide for any possibility of dyadic formulation. But in delineating the situational factors, leader-member relations will be more effective if it is evaluated at the dyadic level. This is not possible in this theorization, as LPC is more stable and the leader cannot really change it with different subordinates. Even Fiedler himself recognizes the trait-like nature of LPC. Consequently, he emphasizes on changing the situations instead of changing leader orientations.

Hersey and Blanchard's Situational Theory. The theory, initially called the life cycle theory, is a confluence of managerial grid (Blake & Mouton, 1964) formulations and Argyris' maturity-immaturity theory.

The starting point is the two dimensions of leader behavior given by OSU studies. They are called "task" and "relationship" behaviors. Specifically, they are defined as follows:

Task Behavior. The extent to which leaders are likely to organize and define the roles of members of their group (followers); to explain what activities each is to do and when, where and how tasks are to be accomplished; characterized by endeavoring to establish well-defined patterns of organization, channels of communication and ways of getting jobs accomplished.

Relationship Behavior. The extent to which leaders are likely to maintain personal relationships between themselves and the members of their group (followers) by opening up channels of communication, providing socio-emotional support, "psychological strokes" and facilitating behavior (Hersey & Blanchard, 1977, p. 104).

The effectiveness of any combination of the two will depend upon the maturity of the followers. Maturity is defined as "the capacity to set high but attainable goals (achievement motivation), willingness to take responsibility, and education, and/or experience" (Hersey & Blanchard, 1977, p. 161). They emphasize that maturity is not a global measure and that "these variables of maturity should be considered only in relation to a specific task to be performed" (Hersey & Blanchard, 1982, p. 161; emphases in original). Maturity thus differs not only from subordinate to subordinate but also from task to task. Maturity has been measured in terms of two dimensions--Job Maturity deals with the skills and technical knowledge required to do the job. Psychological Maturity includes psychological elements of self-confidence and self-respect.

Korman (1966) suggested the possibility of a curvilinear relationship between the two leader behaviors (consideration and initiating structure) and the situation. Taking this clue, Hersey and Blanchard delineate the effectiveness of different styles in terms of the maturity of the followers. They recommend a high task behavior and low relationship behavior for very immature subordinates. As the maturity increases and reaches an average level, the task behavior should decline to moderate level and the relationship behavior should be maximum. When the maturity level is at the peak, both the task and the relationship behavior should come down to minimum.

The model is strong and recognizes the variations across subordinates. The formulators have identified the need for the leader to vary styles with different subordinates. Although the theory hints at a possibility of both the group and the individual levels of analysis, there is no direct test of either. Hersey and Blanchard have not provided any validation studies. Therefore, it is not possible to decipher the perspective. The strength of the theory lies in at least theoretically pointing out the need for the leader to vary his or her behavior across different subordinates (Yukl, 1981).

Path-Goal Theory of Leadership. The theory focuses on the motivational and satisfaction functions of the leaders.

In an earlier formulation, Evans (1970) presented a five-step model. The model started with the leader behavior. It ended up showing how the leader's behavior (initiating structure and consideration) through expectancy explanations leads to satisfaction of the followers. The leader by providing clear links between the means and the ends and by providing outcomes of positive valence can increase the satisfaction of the subordinates. However, Evans did not include any situational variables in his formulation.

House's theory differs from Evans' in that his (Evans') "predictions are not contingent on situational variables" (House, 1971, p. 322).

House (1971), in his original formulation, presented motivation as a combination of valence (intrinsic and extrinsic)

and different path instrumentalities. He then goes on to show how these factors might be influenced by leader behaviors. According to House (1971, p. 324),

> ... the motivational function of the leader consists of personal payoffs to subordinates for work-goal attainment, and making the path to these payoffs easier to travel by clarifying it, reducing roadblocks and pitfalls and increasing the opportunities for personal satisfaction en route.

Thus, the theory states that

> ... leader behavior will be viewed as acceptable to the subordinates to the extent that the subordinates see such behavior as either an immediate source of satisfaction or as instrumental to future satisfaction (House & Dessler, 1974, p. 31).

A particular leader behavior will be effective in terms of satisfaction and motivation of the subordinates depending upon the situation.

Initially (House, 1971), the two dimensions of Initiating Structure and Consideration were taken into account. Subsequently, the two were renamed instrumental and supportive behaviors, respectively, and a third dimension of participation was added. The most recent formulation includes four categories of leader behavior (House & Mitchell, 1974). (i) <u>Directive</u> and (ii) <u>Supportive</u> correspond to initiating structure and consideration, respectively. (iii) <u>Participative</u> leadership involves consultation with the members while making decisions. (iv) <u>Achievement Oriented</u> leadership deals with setting challenging goals, emphasizing excellence, and showing confidence in subordinates' potential to attain the goals.

The theory states that the relationship between leader behaviors and the outcomes of effort and performance is mediated by subordinates' expectancies and valences. The concepts of "expectancy" and "valence" have been borrowed from the expectancy theory of motivation. This theory explains work motivation in terms of a rational choice process that the worker indulges in. The member first evaluates how much effort will lead to a successful completion of work. This is effort-->performance E--> P) expectancy. The worker also evaluates whether the successful completion of the task will lead to positive outcomes. This is the performance-->outcome (P-->O) expectancy. The attractiveness of the outcome is it's valence. Rewards have not only the extrinsic _but_ also the instrinsic valence (House, Shapiro, & Wahba, 1974). The intrinsic valence has the elements of satisfaction, enjoyment, and fulfillment experienced by doing a particular work.

The path-goal theory maintains that a particular leader behavior, depending upon the situation (e.g., task characteristics and subordinate characteristics), is effective if it increases either of the two expectancies or the valence of outcomes. This leads to increased effort and performance.

Although support for satisfaction hypothesis is substantial, motivation and effort hypotheses have failed to find enough support (Filley, House, & Kerr, 1976; House & Mitchell, 1974; Schriesheim & Von Glinow, 1977). The theory does talk about situational variables but does not clearly explicate them. But

since the theory is stated in a general way, there is a possibility of adding the situational variables (Yukl, 1981).

Since the model aims at evaluating the satisfaction and performance of the group, it implicitly takes on an average nature. That is, the leader behavior is directed towards the group, not the individual members; the outcomes are for the group, not for the individual.

Vroom's Leader Participation Theory. Vroom (1960), in his earlier research, found some situations where the autocratic style of leadership was more effective than the democratic one. This finding led him to include the aspect of situation.

Vroom was highly impressed by different aspects of decision-making by the leaders with reference to subordinates. As a starting point, Vroom takes Tannenbaum and Schmidt's classification of different decision-making styles of the leaders. Vroom and Yetton (1973, p. 18) comment:

> The most comprehensive treatment of situational factors as determinants of the effectiveness of participation in decision-making is found in the work of Tannenbaum and Schmidt (1958). They discuss a large number of variables including attitudes of the manager, his subordinates and the situation, which ought to enter into the manager's decision about the degree to which he should share his power with his subordinates. But they stop at this inventory of variables and do not show how these might be combined and translated into different forms of action.

Drawing heavily upon Tannenbaum and Schmidt's classification, Vroom and Yetton (1973) identify five decision-making styles of the leader. They are:

AI. Make the decision single-handedly, using the available information.

AII. Get the information from the subordinates (with or without telling them) and then make the decision.

CI. Share the problems with a few selected members individually and then make the decision.

CII. Take the subordinates as a group and ask for their suggestions. The decision may or may not reflect the subordinates' suggestions.

GII. Share the problem with the group members, discuss the problem without influencing them, and let the group decide.

A close analysis reveals a continuum beginning with a downright autocratic decision-making style ending with a totally participative (democratic) style of decision-making.

They have also indentified two situational variables that affect the effectiveness of a style. First variable asked how crucial was the acceptance of decision by the members. The second question asked how important was the quality of decision. By systematically answering a set of seven questions (in terms of "Yes" or "No"), managers could decide the effectiveness of a particular style. The contingency questions are as follows

(1) Is quality required so that one solution is better than the other?

(2) Is enough information available to make the decision single-handedly?

(3) Is the problem structured?

(4) Is the subordinate acceptance crucial?

(5) Will the decision made single-handedly be acceptable?

(6)   Do subordinates share the goal which are the outcome of problem solving?

(7)   Is there a probability of conflict among subordinates in preferred solutions?

By systematically answering the above questions in the same order, one could decide upon the appropriateness of a style.

The theorization is essentially in the decision-making framework. Vroom and Yetton (1973) themselves have tried to test the model. Most of the studies were on managers who participated in management development programs.

The propounders themselves realized that the model asked for more variance in the leadership style than used by an average manager. The two dimensions mostly used by managers were directive (CII) and participative (GII) styles.

The Nurturant-Task Leadership: An Indian Formulation. The theory at the grass-root level evaluates the impact of social environment on management practices. The formulator, J.B.P. Sinha (1980), proposes that "an effective leader will be required to incorporate the relevant meta values of the system while designing his action strategies for leading his group" (p. 54).

According to Sinha (1980), the normative use of participative or democratic style of leadership is not advisable. These styles will be effective only if the needs and values (e.g., egalitarian) of the leaders match the values inherent in these conceptualizations. Also, the needs, values and goals of the leader, the follower, and the organization have to be in harmony. If these requirements are not met, the use of any style

is deemed to be a failure. Socio-cultural realities are the global values that are shared by all alike. Hence an evaluation of value system at that level will be applicable to all.

Sinha (1980) identified six meta-values of the Indian socio-cultural mien. They are: lack of commitment, showing-off, preference for personalized relationships, dependence proneness, lack of team orientation, and hankering for aram (tendency to relax or rest without being tired).

If one were to fit the theory in a contingency framework, the meta-values of the society will be the situational variables. Sinha recommends a Nurturant-Task (N) leadership for the Indian social milieu. N leadership has elements of task and nurturance. N leader

> initiates, guides and directs his subordinates to work hard and maintains a high level of productivity both quantitatively and qualitatively .... His task orientation, however, has the mix of nurturance. He cares for his subordinates, shows affection, takes a personal interest in their well being, and above all, is committed to their growth" (Sinha, 1980, p. 55).

This should not be taken to mean that the NT style of leadership is the best and the most effective. It is considered flexible and transitional. The universal goodness of participative style is accepted. In this light, it is suggested that given the Indian work values, subordinates are not mature enough to make the participative style successful. N works as a preparatory device. It helps the subordinates grow and respond positively to the participative style of leadership. Thus, the propounders emphasize upon shifting from N to participative

style once the subordinates are responsible and mature enough.

COMMENTS. In the preceding paragraphs, we highlighted some leadership theories that identify aspects of situations (independent of leader behavior) influencing leadership effectiveness. They have all been concerned with establishing the effectiveness of leadership styles. It could be in terms of satisfaction, performance, motivation, or decision-making. Leadership has always been important.

This contention takes a volte face when it is contended that there are situations where leadership (hierarchical) has no significant impact on subordinate satisfaction, motivation, or performance (Kerr & Jermier, 1978). Aspects of organizational, subordinate, and task characteristics are identified which make the use of leadership reduandant. Thus, situations not only help in predicting the usefulness of a particular style but also help in predicting the use of no leadership at all.

All the situational theories ask for an understanding of complex situational variables. Thus, if a manager has to be effective, he or she has to analyze the situation in depth each time he or she indulges in the acts of leadership. With the hectic and fragmented pace of managerial activities, it is not possible for a manager to do so (McCall, 1977). McCall also criticizes the emphasis on one style being effective in a given situation. The situations are so dynamic that more than one style may be effective.

All the situational theories are almost static and do not appreciate the dynamism of situations. Although NT (Sinha, 1980) and situational (Hersey & Blanchard, 1977) theories do talk of a shift in style, the situations are supposed to be changed by the leaders themselves. As a result, all theories have failed to evaluate the leadership process as it actually takes place. The problem with all of them is that they prescribe without actually diagnosing the process.

Summary

This section on elemental theories dealt with the theorizations that look for aspects of the leader, the situation, and the two of them in conjunction in determining leadership effectiveness. The trait theories stressed the importance of personality characteristics in leadership. Traits were fixed givens with very little scope of flexibility. Hence, it is not possible to think of within-group variations in this framework. Predictably, the approach failed.

Then came in the aspect of behavior. Different leader behaviors were identified and the effective leader behavior was to be established. All the behavioral theories identified two dimensions of leader behavior--the task and the interpersonal. The emphasis in all of them is on the use of interpersonal style. The assumption in all the theorizations is average. The behavior of the leader is evaluated for the group, not for the individual. Statistically, the variations within a group are taken as error.

Also, the theories treated satisfaction, performance, and effort as group phenomena.

Finally, the contingency theories focused on the situational variables as the deciding factors. Assumptions here also are average.

These theories have effectively tapped the relevant dimensions. One major flaw with all of them is their failure to recognize the individuality of the subordinates. Subordinates are treated as a passive group, who receive a collective treatment and respond collectively with respect to leadership behavior.

Next, we shift our focus to process oriented theories. These theories identify the functional aspects of leadership.

Process-Oriented Models

While discussing some process oriented conceptualizations, we identified a few processes that are inherent in the phenomenon. Process theories are not exclusively process oriented; they might have elemental aspects as well. They are grouped in this way because of their focus of attention. Further, the line of demarcation is only arbitrary. There are no clear criteria of the division except for the structural and functional nature of theorizations. Also, these theories are involved in evaluating what happens in the process of leadership instead of just emphasizing the use of one or more styles.

These conceptualizations identified perceptual and cognitive processes, influence process, and exchange process. In this section, we shall briefly touch upon one formulation from each of the three processes.

Leadership as an Attributional Process

The theory states that each person has an implicit theory of leadership. If one wants to understand a leader's behavior, he or she must go inside his or her head to see what he or she is thinking. How the leader perceives the situation is the right way to study the process (Pfeffer, 1977).

Green and Mitchell (1979) formulated a model to study leadership as attributional process. The model aims to understand leader behavior in terms of what he or she (the leader) perceives to be the cause of followers' behavior. For example, how the leader reacts to the instances of poor performance of the subordinates will depend upon his or her (the leader's) attribution processes. The leader's behavior when he or she attributes the poor performance to external (to the subordinates) factors, like task difficulty, will be different from the behavior when he or she attributes it to the internal (to the subordinates) factors, like incompetence. According to Mitchell (1979), the supervisor's recourse to the use of coercive power for subordinates' noncompliance and poor performance will also follow the similar attributional process. Mitchell has also attempted to explain some deficiencies in earlier research through implicit theory assumptions. The low correlation between

superior, subordinate, and peer rating of the leader behavior is because of their implicit assumptions (Mitchell, Larson, & Green, 1977).

Thus, the leader's behavior towards the subordinates is a function of the reasons leader gives for subordinate behavior.

The theory may seem to be depicting (identifying) individual nature of subordinates, but the attribution process of the leader is at the group level and so are the outcomes of poor performance and non-compliance. In addition, the theory is essentially cognitive and hard to implement in real-life organizational settings.

Leadership as a Power-Influence Process

Before going on to evaluate leadership as a power phenomenon, one needs to briefly examine the concept of power.

Social organizations, through hierarchical differentiation, perform with the backdrop of power. The consequences of power are witnessed and experienced at every level of the organization.

In the field approach, power has been conceptualized in the Lewinian framework. Power is the resultant force that A exerts over B in B's particular life-space (Cartwright, 1959). Cartwright, in this framework, wanted to evaluate power in the network of other variables. March (1955) studied the concept of power with reference to decision-making. In this framework, the change or the outcome of power was the focus of interest. The social exchange conceptualization of power focuses on the

interaction between individuals. Power, therefore, is one person's capacity to affect the quality of outcomes of another person.

In the organizational framework, where do people get the power from or what are the major sources of power? A power base (source) leads to influence in social settings. Of the few understandings of these sources (e.g., Etzioni, 1975), the typology given by French and Raven (1959) has received the maximum attention. They identified five bases of power in organizations. They are: reward, coercive, legitimate, referent, and expert. Subsequently, two more bases were added to the original list (Hersey, Blanchard, & Natemeyer 1979; Raven, 1965). They are: information and connection.

Reward power, as is obvious, is the perception of one member that the other has the potential to reward. Coercive power is the perception that the other can either remove rewards or administer punishments. Legitimate power is the perception that the other has a right to weild power and the recipient is obliged to yield to that. Referent power is based upon perceived attraction. It might result from friendship, identification with a model, or feelings of shared identity. Expert power arises from the perception of knowledge and expertise in the power weilder. Information power is the perception that one has access to information that is valuable to others. Finally, connections with influential or important people give rise to connection power.

According to Janda (1960), leadership as a subset of power phenomenon is a sound and useful theorization which is easy to operationalize. In Cartwright's field framework, thus,

> leadership is an influence process whereby $\underline{O}$'s actions change $\underline{P}$'s behavior and $\underline{P}$ views the influence attempt as being legitimate and the change as being consistent with $\underline{P}$'s goals (Kochan, Schmidt, & DeCotiis, 1976, p. 285).

Power, according to Cartwright (1965), is O's capability of influencing P but is not bound by O's position in the organization. One point being put through this exercise is that both leadership and power are influence processes. Thus influence connects the two phenomena. "Whereas power is the potential influence, leadership involves the actual exercise of power" (Ansari, 1990, p. 53). In other words, leadership is one manifestation of power.

After the link between power and leadership has been established, one question logically follows: how leader power and influence are related to leader effectiveness. A stream of research has been conducted to compare the effects of different bases of power. Most of them have been on the French and Raven (1959) typology. Studies have shown that the elected leaders have greater right to their office and are perceived more attractive (Raven & French, 1958a, 1958b). In terms of leader behavior, it has been shown that participative leadership is more effective than directive under the two power bases—reward and coercion (Kipnis, 1958). Leaders have also been shown to use more formal, referent, and expert power in crisis situations than

in non-crisis situations (Mulder, de Jong, Koppelaar, & Vernhage, 1977). In brief, the use of referent power and reward power are found to be more effective. For Katz and Kahn (1978), the phenomenon of leadership is influence over and above the organizational contract. For them, it is the referent and information bases of power that are a measure of leadership effectiveness.

Thus, the power-influence approach studies leadership as influence process. Although the field and social exchange approaches to study power are essentially of dyadic nature in their original formulations, the overemphasis on group in leadership led to the use of power as averaged over a group.

Leadership as a Social Exchange Process

The theory attempts to explain how the reciprocal influence process occurs over a period of time. At the grass-root level, it considers the interaction between people. Specifically, it evaluates the exchange of favor or benefits in social interaction. This kind of exchange, if repeated over a period of time, leads to an attraction between the two parties concerned.

In the context of leadership, the theory states that how a leader emerges in a group is a matter of these exchanges. By some virtue or the other (competence, knowledge, etc.), one member (the leader) gains credit through repeated exchanges of this kind. These credits provide an elevated status to the leader. As a consequence, the other members develop some

expectations from the leader. These credits are called "idiosyncratic credits" (Hollander, 1958). They are so called because a person who accumulates these credits is allowed more to deviate from group norms without punishment.

So far the theory looks like a theory of the emergence of a leader. Nonetheless, it does have relevance to organizational leadership as well, although the relationship is complex. It becomes complex because the exchanges between the leader and the members are superimposed on a broader organizational contract. A leader is a leader not only by virtue of holding a position. However, just by virtue of holding a position and not having any idiosyncratic credits, a formal leader might lose status and esteem among the subordinates. This particular theory of social exchange focuses on one member (i.e., the leader) and the group. One individual becomes a leader by virtue of accumulating credits with respect to the group.

Summary

The first part of the chapter section dealt with the various formulations and conceptualizations that directly or indirectly made the average assumptions. Stated differently, because of the overemphasis on leadership as group phenomenon, somewhere in the course of development, theorists make an average assumption.

The first section contained various conceptualizations. A number of definitions have been given to explicate the various

facets of the phenomenon. But since it is universally considered a group phenomenon (though there is a possibility of two-member group), most researchers explain leadership in terms of the group.

Next, the various models and theories are dealt with. Two broad sets of theories have been examined. The first set, which also happens to be the most widely researched, deals with the theories that seek to explore structures or elements of the leadership phenomenon. The search leads to identification of elements in the leader (traits and behaviors) and also in the situation. The theories are solely concerned with the average nature of leadership. The emphasis on group has been taken to mean that the differences occur only between groups, and variations within groups are completely overlooked. All kinds of elemental theories--trait, behavior, and situationally-determined contingencies--suffer from this drawback. Trait approach failed because it presumed some fixed characteristics in the leader behavior, and contingency approaches also did not find support because of their average nature. It looks ironical, indeed, that the leader behavior is variable across situations but not across members in a work-group.

The second set of theories (i.e., process-oriented theories) do try to understand the phenomenon of leadership, but their explanations also are all in the average framework.

Thus, what is needed now is to build an integrated theory that understands leader behavior in terms of the actual process

of leadership. An evaluation of elements of leadership rooted in strong theoretical grounds is the need of the hour. Now, we take up one such formulation.

LEADERSHIP: THE ALTERNATIVE VDL APPROACH

As a reaction to the averaging tendency of all the major formulations, an alternative Vertical Dyadic Linkage (VDL) theory has been developed. The theory is a comprehensive one. It begins to investigate the actual phenomenon of leadership as it occurs in organizations. It then tries to understand the phenomenon in terms of other organizational events or phenomena. It does not prescribe leadership behavior or style; it only attempts to investigate the process as it actually occurs in organizations. Thus, the uniqueness of this theory is that leaders _differentiate_ between the members of a group. In the organizational setting where leaders do not emerge, but are appointed, an understanding of the work-unit functioning is a must to understand leadership. As will be pointed out in the next section (on theoretical bases), how it becomes important for the leader to have differential relationship with the members. The model by taking into account leader's behavior takes care of the elements, and by recognizing the phenomenon of unit differentiation also incorporates processes involved in leadership. Thus, the theory is a confluence of elements and processes involved in leadership.

Conceptualizations

An alternative understanding of leadership phenomenon stems from the fact that the leader can and does behave differently with different subordinates in a work-group.

All the other leadership models (outlined in the previous part of this chapter) are average because of the two assumptions they implicitly make. Firstly, all the members in a unit are treated as a homogeneous lot, so far as their work experiences are concerned. Consequently, they are all clubbed together and are treated as one entity--the "work-group." Secondly, the leader is believed to behave essentially in the same (consistent) manner towards all the subordinates. This leads to averaging leader behavior over the work-group (Dansereau, Cashman, & Graen, 1973). However, these assumptions get falsified in the ALS framework itself. The leader's self- and the work-group-ratings of the leader behavior show near zero correlations (Evans, 1970).

The Vertical Dyadic Linkage (VDL) approach focuses on the leader-member dyad as the unit of analysis. In this perspective, then, the leader's interactions with individual subordinates are of prime importance. A dyadic approach to the study of leadership is more global and more comprehensive. By focusing on dyadic relationship, it does not rule out the possibility of average style. Instead, it provides a test for both. If the responses in all the dyads are similar, they can indeed be averaged.

The relative stand of the two approaches with respect to each other was evaluated in an earlier study by Dansereau et al. (1973). They concluded:

> ... this VDL approach reveals orderliness in the data that the average leadership style would have assumed _a priori_ to be mainly error variance. On the other hand, orderliness revealed by the VDL approach could not have been extracted from the data using the ALS approach (p. 197).

The theory posits that the leaders do behave differently with different subordinates (Dansereau, Graen, & Haga, 1975). Although each dyad has a unique interaction or leader-member exchange (LMX), theoretically, two extreme interactions are of interest. The two extremes are the good and the poor quality of exchanges. They have been variously labeled: leadership and supervisory relationships (Danserean et al., 1975), the informal assistants and the ordinary members (Graen, 1976), the IN/OUT-Group relationships (Graen & Cashman, 1975), or high and low quality relationships (Graen & Schiemann, 1978).

According to this theory, the members have different interactions with their leader because they define their roles differently—a result of different dynamics involved in the role development process by different members. Though the model recognizes the fact of unit differentiation but does not state that differentiation leads to effectiveness. In this sense, the model is not prescriptive; instead, it is a factual understanding of the leadership process.

The unit differentiation under a leader follows an exchange process between the leader and a member. As a part of which some

therefore, not clear whether the members perceive the difference in leadership techniques or not. The VDL theory incorporates both the subordinate and the leader perspectives.

If indeed the subordinates perceive the difference in leader behavior, their organizational experiences are bound to be different. Be it satisfaction, commitment, or performance; as long as the frame of reference is leadership, the focus of attention should be the individual members. As Dansereau et al. (1975, p. 72) discovered: "... the attitudes and reactions (turnover) of the members (in-group) clearly reflected the reward value of differential treatment over time."

The integrated framework of the VDL model is now presented. The theoretical bases reveal how these unique relationships develop along with role development (by the members) through the process of social exchange.

Theoretical Bases

In the following sub-sections, an attempt is made to trace the roots of unit differentiation. If unit differentiation is so universally present, what are the reasons or explanations for the same.

The Background: Negotiability of Roles

The VDL theory explains the leadership phenomenon in a developmental perspective. The unique interaction that develops between a leader and a member is an outcome of role development

by the members. How the members develop their roles through
interpersonal exchanges with their leader forms the crux of the
theory. To fit the leadership phenomenon in a broad
organizational framework, let us begin with the understanding of
organizations and the place of roles in this understanding.

A systemic approach views the organization as

energic input-output systems .... Social organizations
are flagrantly open systems in that the input of
energies and the conversion of output into further
energic input consists of transactions between the
organization and its environment (Katz & Kahn, 1978, p.
20).

Thus, an organization imports energy from the environment
(input), works upon it (throughput), and exports the product to
the environment (output). This process of energic exchange is
cyclical and the survival of the organization depends upon the
maintenance of these cycles. In other words, these cyclical
processes constitute the structure (Allport, 1954, 1967) of an
organization. What are the mechanisms and structures involved in
these processes? These processes are the outcome of coordinated
activities of the office-holders or occupant in the organization.
These coordinated activities present an interwoven and cohesive
network. It is this network that constitutes an organization.
This discussion highlights two important aspects of the
organization: (i) organizations owe their existence to the
network of coordinated activities of people and (ii)
organizations are open systems and, hence, are in constant
interaction with the environment.

To understand the social aspects of the organization, one focuses on the activities of components or office-holders. The organizational plan is made up of some nodal points. These nodal points have some particular functions to perform in the network. The nodal points are the offices, and the people occupying these offices are the occupants or office-holders. There are some relevant prescribed behaviors associated with each office. It is these prescribed behaviors or behavior patterns that constitute a role. Thus in the final analysis, an organization is a "network of standardized behaviors" (Katz & Kahn, 1978, p. 45).

If the roles or behaviors of nodal occupants are fixed and static, the organizations should also be rigid and static. As mentioned before, organizations are in constant interaction with the environment. Therefore, any changes in the environment necessitate equivalent changes in the organization. Since the environment is dynamic and modern-day environment is marked with extreme transience (Dunnette, 1972), organizations must dynamically adapt to these changes for their survival (Bennis, 1966). The organizations will be dynamic and negotiable only when it's constituents (i.e., the roles) are dynamic and negotiable (Barnard, 1938).

At the grass-root level, these negotiations are the negotiations between the individual members (role occupants) and the organization. Thus, the process of negotiation involves inducements and contributions (Barnard, 1938) from both the parties--the organization and the role occupant. A dynamic

conceptualization of organization would expect its members to put in more efforts to cope up with the added new responsibilities. For this purpose, the organization offers rewards and resources that the role occupants might value and seek their services in return. Schein (1980) calls this two-way influence relationship, the "psychological contract." Thus, negotiation takes place mostly for the unstructured, unforeseen tasks. So far, we have touched upon exchanges but only hypothetically. Organization can neither offer rewards nor can it seek services directly, we now delineate the appropriate level to study these exchanges.

The Dyad: Unit of Negotiation

The fact concerning the negotiations is well taken, but how is it that these negotiations take place? (This question will be addressed a little later) for the moment, let us see at what level do these exchanges take place.

Since the very notion of exchange involves a participation of at least two parties, the individual level is ruled out. To delineate the unit of analysis, let us go back to the systemic conceptualization of an organization. The interwoven network of activities forms the organizational structure. This interweaving will involve at least two people, to begin with. Organizing, in this sense, is viewed as the process of interlocking of the individual behavior between two or more people (Weick, 1979). A unit of this interlocking will involve an action by one role occupant and a reaction to it by another role occupant. This

cycle of action by one and reaction by another is called a double interact (Weick, 1979). Thus, at the most basic level, interaction occurs at the level of double interacts. These are the units that describe interpersonal influence (Hollander, 1976). In an organizational framework, one conceives of several interlocked behavior cycles of these double interacts which are embedded in the larger system. As Weick (1979, p. 112) points out,

> it is these cycles that are the stable forms within organizations, and it is these cycles that are embedded into larger subassemblies in the interest of stabilizing equivocal displays and transforming them into information, enacted environments and cause maps.

Thus, the right unit of analysis is a dyad. Next, we examine how and/or through what processes do these exchanges take place?

Role Development and The Leader

The bureaucratic conceptualizations treated organizations as fixed entities. Hence they asked for a routine machine-like adherence to norms by the members. This precluded any development or negotiation in roles. But, as has been pointed out that roles are flexible and negotiable, there is a scope for the development of roles by individual members.

Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) proposed a role episode model of role development by the organizational members. This was in response to the incompleteness of the fixed organizational design. To understand this, let us go back once

again to the structure of an organization. Organization is a network of interdependent activities. An occupant takes up a position in this network. We call him or her the focal person. Some offices will be closer to this focal person than others. Since the activities are interdependent, all these positions or offices (that are closer) will be affected by the activities of the person at that particular position. All such positions or offices that are directly affected by the role performance of the focal member constitute the role-set of the focal member (Merton, 1957). These are the people who try to influence the role performance of the focal member. How they try to influence has been understood in terms of role-episode. The different members of the role-set send information about the role to the focal member. The member receives the information and makes a response. The response is sent back to the role sender. Thus, a role-episode consists of a "complete cycle of role sending, response by the focal person, and the effects of that response on the role senders" (Kahn et al., 1964, p. 26). Thus, besides the technological and authority based demands, there are some interpersonal demands that are placed on the focal member by the role-set.

The most important role-set for the focal member is his or her immediate superior (Graen, 1976; Graen & Scandura, 1987), because it is the immediate superior only who has a formal and direct control over organizational resources (Katz & Kahn, 1978). If the leader is indeed the most important role-set, what will be

the leader's concern when he or she sends information to the member through role episodes?

Now, we examine what are the areas where the leader needs members' help (role performance) and defines leadership in that context. As stated a while ago, owing to a transience in the environment, organizations are constantly faced with new or unforeseen situations and tasks. As a result, leaders too are faced with these unforeseen, unstructured tasks. Working on these tasks is not a part of formal organizational contract of the members. All the same, the leader has to get the task done from his or her subordinates and for this he or she has to use influence which is not a part of the organizational contract. In this light, hence, leadership is "the influential increment over and above the mechanical compliance with the routine directives of the organization" (Katz & Kahn, 1978, p. 528, emphases in original). Although Katz and Kahn have used the definition in the power bases framework, the definition fits the present conceptualization and hence is employed in the present research.

Negotiation on Unstructured
Tasks and Unit Differentiation

An overall observation of the foregoing discussion seems to suggest that the phenomenon of leadership be studied with reference to unstructured tasks. Unstructured tasks are undefined, ambiguous contingencies. By their very nature, they allow for multiple task formulations. They are characterized by

a number of goals to be attained and a number of ways (means) to attain these goals. They lack well-defined ends and means, as they arise from environmental changes. As a consequence, they cannot be reduced to standard organizational procedures. Nevertheless, some members do have to work for these jobs in order for the organization to survive.

If leaders too are faced with these unstructured tasks, then how is it that the leader works on them? The leader does need the collaboration of members on these jobs. Since all members are not obliged to work on these unstructured tasks, the leader develops an interaction only with a few members who collaborate with him or her.

How some members get to collaborate with the leader has been understood in terms of role development. The contention is that some members incorporate working on unstructured task as a part of their role. This is a result of the role development by these members with leader as the role-set. Next, we take up the process of role development by the members.

Role Development by the Members

The process of role development by the members, with the leader as a role-set, has been aptly delineated by Graen and Scandura (1987). The following discussion draws heavily upon their thesis. The process is understood with the backdrop of unstructured tasks, as roles become negotiable only for such tasks. Structured tasks demand for a prescribed role adherence from the members. Thus, the whole process of role development is

applicable only for those members who collaborate with their supervisors on unstructured tasks. Yet, the initial stages of role development might be tried out with all the members.

The process is understood from the time when the member joins the unit under a leader. This is the point of zero contact (Levinger & Snoek, 1972), and neither the leader nor the member has any information about the other. Therefore, the interaction at this stage between the two is just formal and contractual. There are three stages through which the exchanges between the leader and the member get coordinated. The three stages are--(i) role taking, (ii) role making, and (iii) role routinization.

Role Taking. This is the initial phase wherein the leader evaluates the relevant skills of the members. At this stage, the behaviors of both the parties are stereotypic (Altman & Taylor, 1973) and formal. The leader evaluates the members' motivation, orientations, skills, etc. through repeated role-episodes. A typical role-episode at this stage is shown in Figure 1.1a.

The leader puts across his or her expectations in the form of role to the member. The member receives it and matches it with his or her own orientations, skills, etc. Based on this the member makes an appropriate response. The leader perceives the response against his or her own expectations. Following this the leader decides whether to evaluate the member further, go on to the next stage, or give up further negotiation. If the member does not come up to the leader's expectations, no further
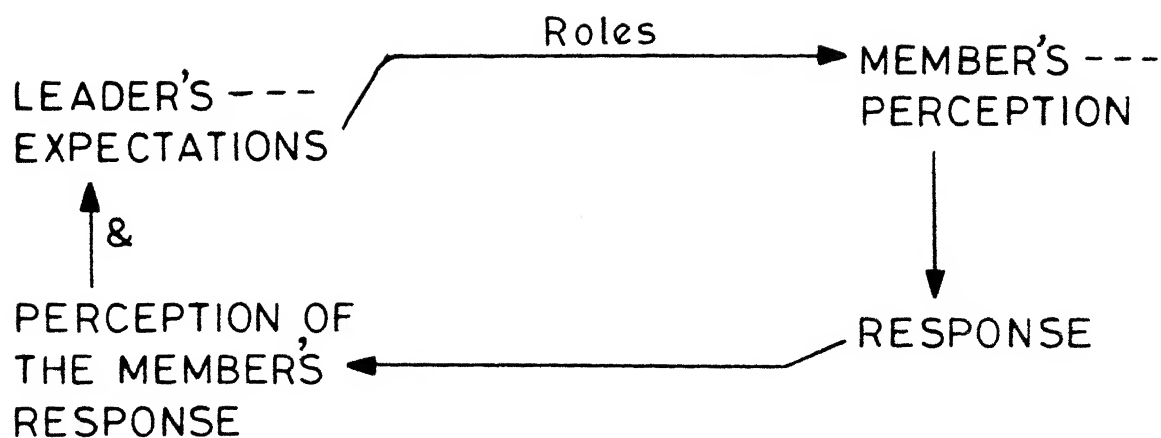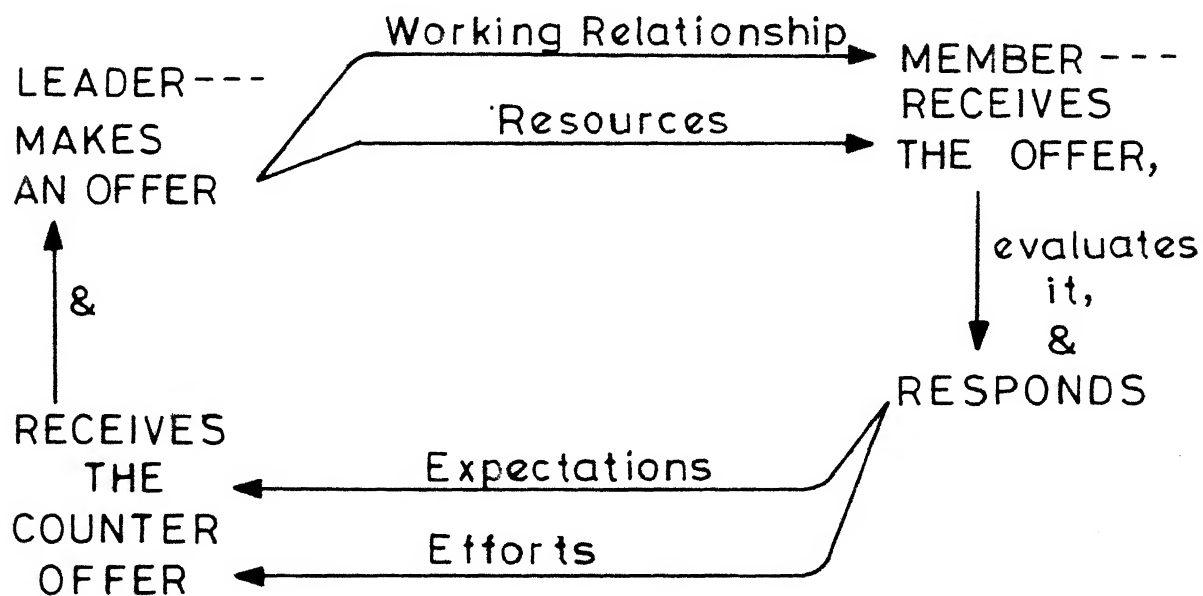
Figure 1·1. Role development by members --
(a) Typical role taking and (b)
(b) Typical role making episodes.

negotiations take place and the exchanges between them remain contractual. The evaluation usually is done through repeated role-episodes.

As the background is contractual, the leader evaluates the members through structured tasks which are a part of the organizational givens. The member gets socialized into the formal organizational structure.

The leader is the active initiator and the member a passive responder. "Clearly, the superior acts and the member reacts; the superior is an active problem solver and the member is a passive responder" (Graen & Scandura, 1987, p. 181).

In the next stage of role making, actual exchanges between the leader and the member take place.

Role Making. Active social exchange is the hallmark of this stage. Once the initial stage is over, the dyadic relationship starts taking a shape. The leader offers the member an opportunity to work on different tasks. He or she makes the offer and the member makes a response. The process takes place as shown in Figure 1.1b.

The leader presents an opportunity to the member to work on unstructured tasks. The offer contains leader's expectation about member's input (working relationship) and the rewards that the member gets in return. The member evaluates the offer in terms of his or her own capabilities and attractiveness of the reward. On the basis of this, the member sends his or her own expectations and inputs. The leader finally evaluates the

member's response against the initial offer and acts accordingly.

Since the interaction is based on exchanges, a perception of "equity" or "fairness" by both the parties is a must for the exchanges to continue or grow (Homans, 1961). Additionally, each party must have resources that are valuable to the other. The member on his or her part should have the relevant skills, know-how, and motivation, and the leader must have resources to offer to the member. Over repeated exchanges of this kind, a working relationship develops between the two wherein both the parties have a knowledge of appropriate transactions. In the final phase, this coupling of behavior gets routinized.

Role Routinization. In this phase, the coupling gets crystallized. There are no overt exchanges between the leader and the member. The member works on unstructured tasks with the leader, as it becomes a part of the member's role. The two are totally interdependent for relevant tasks. A kind of dyadic understanding develops between the two.

If one took a cross section of the dyad at this phase, it will be characterized with positive relational dimensions. The details of this dimension are taken up in Chapter 4.

The Continuous Nature of Exchanges

The foregoing discussion shows the development of a differential unit. Too simplistic view of this would mean that the work-group under a leader gets differentiated into two sets of members--those who collaborate with the leader on unstructured

tasks (IN-group) and those who do not (OUT-group). The exchanges are taken to be continuous, so that they can be placed on a continuum.

Two discrete categories would be acceptable if one divides the jobs into two categories—structured and unstructured. But structure is not all-or-none quantity. The structure or unstructure in a task can vary on a continuum. Naturally, the quality or quantity of exchanges too would vary on a continuum. This gives rise to a unit which is differentiated on a continuous basis.

The theoretical bases presented above clearly show as to how the unit differentiation takes place and how it is imperative in organizations. Now, we take up some empirical studies conducted to test the theory.

An Update

Presented in the following paragraphs is a review of relevant empirical studies testing and validating the VDL model. The construct of the quality of interaction is briefly introduced. Also examined are empirical researches conducted to compare the ALS and the VDL models. Finally, some extensions of the model are presented.

Precursors to the VDL Formulation

In their earlier research endeavors, Graen and his collaborators were mainly evaluating the traditional measures of

initiating structure and consideration propounded by the Ohio State researchers. Their studies were aimed at testing hypotheses concerning leader behavior as measured by LBDQ but indirectly and unwittingly helping in the VDL model develop.

In one study, Graen, Dansereau, and Minami (1972b) investigated conflict for the man-in-the-middle. The man-in-the-middle is a manager trapped between his or her subordinates and his or her leader. These managers were analyzed in terms of two leader behavior dimensions. Their analysis indicated that, at lower organizational levels, both the superiors and the subordinates evaluated the man-in-the-middle favorably, if he or she initiated more structure.

In another study, they (Graen, Dansereau, & Minami, 1972a) evaluated the statistical interaction of initiating structure with consideration, and found that the correlation between the subordinate performance and leader consideration was positive for very high or low structure. On the other hand, for moderate structuring, the same correlation was near zero.

In yet another study, they aimed at testing the relative predictive power of expectancy and equity theories (Dansereau et al., 1973). The findings of these studies do not have any direct bearing on the model, nor were they aimed to do so. Yet, they are important because they employed individual level of analysis as opposed to the averages used in traditional studies. Hence, they are the much needed empirical base on which the VDL theory was developed later (Miner, 1980).

In the next set of studies, though the specific aim was not to test the dyadic assumptions, these studies and their findings fitted in the theoretical bases (role behavior) of the theory. Johnson and Graen (1973) conducted a study over a period of 16 weeks. They found that all those who left employment towards the end had experienced greater role conflict in earlier stages. Also, these people had ambiguous relationship with their leader. In an extension of the same study, Graen, Orris, and Johnson (1973) found that those people who did not consider their jobs career relevant showed more turnover. More importantly, these people had less communication with their leaders and participated less in decision-making. The hypotheses were not aimed at testing within-group variance in terms of IN/OUT-Groups. At the same time, the standing of the subordinates in these studies corresponds to the OUT-Group.

In yet another study, Haga, Graen, and Dansereau (1974) found that more professionally oriented people indulged more in the role making or negotiation activities.

The designs of the forementioned studies were not to predict the outcomes for IN/OUT-Group subordinates. All the same, they lend heavy support to the fact that the subordinates' outcomes are a function of their relationships with the leader. These studies did lead to a formal conceptualization of the theory, as they focused on individual's relationship with the leader.

Comparison of the ALS and the VDL Approaches

As has been made amply clear in the preceding sections, ALS models assume that "the behavior of the leader is in fact reasonably constant for all members" (Seeman, 1957, p. 95), thereby presuming the work-group to be homogeneous. Statistically, the unit of analysis in this case is the work-unit. In contrast, the proponents of the VDL theory claim that "the appropriate level of analysis is not the work unit ... but the vertical dyad" (Graen & Cashman, 1975, p. 150). They (Dansereau et al., 1975; Graen, 1976; Graen & Cashman, 1975) argue that since the ALS approach presumes the leader behavior to be uniform across all members, the deviation within a unit is treated as error variance and is eventually ignored. They assert that it is this assumption of homogeneity that is responsible for "such a slow progress in the leadership area" (Dansereau et al., 1975, p. 47). They hence focus on variations within the group and hold that the leader-member dyad is the appropriate unit of analysis. In view of these conflicting assertions, some reviews of leadership research emphasize on the importance of studying and exploring the differences between these two approaches (e.g., Schriesheim & Kerr, 1977).

In line with this need, Schriesheim (1979) evaluated the relative validity of the two. For this purpose, subordinates' responses about their leaders' behavior were taken with two frames of reference--(i) leader's behavior towards the individual subordinate and (ii) the leader's behavior towards the group as a

whole. The results showed a very high correlation between the two. This implies that the members do not perceive any difference in their leader's behavior towards themselves individually as well as the work-group as a whole. The high correlation is probably because of the measure used. LBDQ XII has items which aim at the leader's group behavior--a reason behind the inflated results.

One way of comparing the two models is by evaluating individual responses in terms of the group responses. Statistically, the obtained variance is partitioned into within-group and between-group effects (WABA) (Dansereau & Dumas, 1977; Markham, Dansereau, & Alutto, 1979). In other words, the responses of individuals can be broken down into two elements. One element is the between-group effects wherein the individual responses are averaged for a group giving one score for the group. These scores for different groups are compared. The other is the within-group effects wherein individual responses are compared with respect to the group means.

Katerberg and Hom (1981) conducted a study employing hierachical multiple regression analysis to compare within-group and between-group variations. Based on their results, they conclude:

> the present results clearly indicate that within-group variation in leader behavior continues to predict criteria even after the confounding effects of between-groups leadership variation are removed (p. 220).

Vecchio (1982) replicated the above study in a field experimental setting. He reported that "the results of the

hierarchical regression analysis for the attitudinal measures successfully replicated Katerberg and Hom's findings" (p. 205). But, neither the ALS nor the VDL approaches could predict the performance of the subordinates.

Graen, Liden, and Hoel (1982) compared the two approaches for predicting the outcome of turnover. They conclude,

> ... it is the unique exchange that develops between a leader and a member, not a leader's overall style, that influences a member's decision to remain in the organization (p. 871).

This is a finding that was replicated for an all-female sample of nurses and their supervisors in another study (Ferris, 1985). All the same, Vecchio (1985) did not find similar results for subordinates at a lower organizational level in yet another replication of the Graen, Liden, and Hoel (1982) study.

Dansereau and his coworkers were chiefly concerned with the development of multiplexed approach to compare the levels of analysis. In the process, they analyzed the construct of "negotiating latitude" from the Dansereau et al. (1975) study (Nachman, Dansereau, & Naughton, 1983). They used the WABA approach to compare the ALS and VDL approaches. The results showed systematic correlations for both between- and within-correlations. The objective was to test whether negotiating latitude was the dyadic phenomenon or the group phenomenon. It was also observed that there were individual differences which were neither at the dyadic level nor at the group level (Dansereau, Alutto, Markham, & Dumas, 1982). On the other hand, this result can also be interpreted at the dyadic level wherein

the leader and the member interact on a "one-to-one basis independently of either person's relationship with others outside of that dyad" (Nachman, Dansereau, & Naughton, 1985, p. 661).

Thus, the right question for enquiry is not which model is a better predictor: ALS or VDL. The need, now, is to examine the two as simultaneous processes.

Operationalizations of LMX

The construct to measure the exchanges between a leader and a member has been coceptualized in many different ways. The various operationalizations have received a detailed treatment in Chapter 4. Different measuring instruments with different bases have been formulated. At this stage, it will be sufficient to say that the operationalization of the construct is sketchy. Thus, a psychometrically sound measure, which corresponds well with the basic theorizations of the VDL, needs to be developed.

Antecedents of LMX

The fact about differentiated unit is well taken. True, the leader differentiates between the subordinates. But, what are the factors that determine the quality of exchanges between a leader and a member? These factors might come from the leader, the member, and/or the organizational structure. There have been a few attempts at identifying these variables (e.g., Bruning & Cashman, 1978). On the whole, the research is impoverished in this area.

Graen and Cashman (1975) suggested that "the compatibility of some combination of members' characteristics and some combination of leaders' characteristics" (p. 155) could be an important determinant of the quality of exchange.

Although the compatibility hypothesis was not directly tested, Wakabayashi and Graen (1984) examined the effects of the subordinates' job potential and university ranking (competence) as a determinant of career progress. The quality of exchange was shown to mediate the relationship between competence and career progress.

Lowin and Craig (1968) documented that leaders showed more warmth and support towards competent subordinates. Kim and Organ (1982), in a more direct test with the experimental setting of MBA students, discovered that the subordinate competence was a very strong determinant of the quality of exchange. In a replication of the same study for the social service organizations, the findings were validated (Snyder & Bruning, 1985). The findings can well be explained in terms of the social exchange theory (Blau, 1964) as per the model. Since the leader, according to the theorization, is interested in collaboration on unstructured tasks, he or she is interested in the member's relevant skills. Competence in the exchange framework is the input from the subordinate which is a valued outcome for the leader.

As we have noted earlier, the development of leader-member exchanges is rooted in the role making process for unstructured

tasks. Therefore, variables related to roles and nature of task should be potentially fruitful determinants. Kim and Organ (1982) also studied the statistical interaction between the subordinate competence and task stress. The analysis indicated that, for high stress jobs, the leader initiated better quality of exchanges with competent subordinates. Snyder and Bruning (1985), in their replication study, took role conflict and role clarity, instead of task stress, along with competence. The interaction hypothesis was not significant either for role conflict or for role clarity. In this study, the measures of role conflict and clarity were taken both from the leader and the subordinate perspectives. In the final analysis, both were averaged to give one score to each variable. This probably led to the discrepancy in the results.

The studies mentioned above tested the subordinate characteristics either independently or along with task variables (e.g., role stress). The compatibility hypothesis mentioned at the outset remains to be investigated. Duchon, Green, and Taber (1986) tried to see a match between some demographic variables of the leaders and the members. The test was not a one-to-one match of the leader and the member. The results showed that most of the people who were a part of the IN-Group were females and belonged to higher class status (i.e., college juniors or seniors as opposed to freshmen or sophomores). The parallel analysis for the leaders revealed that all the leaders had higher class status and 31 of the 49 leaders were females. The results fit into the

similarity proposition. All the same, it is only an indirect test of the compatibility hypothesis.

The empirical evidence testing the antecedent conditions is, indeed, very meagre. Relevant dimensions need to be mapped to test the "compatibility hypothesis" as this would lead to an understanding in the exchange framework. Also, the variable of climate that has been found effective in leadership area (e.g., Baumgartel, 1981; Likert, 1967; Litwin & Stringer, 1968) needs to be studied.

Consequences of LMX

Almost all the leadership theorizations have aimed at predicting outcome variables. The outcomes have been mostly for the members. As pointed out earlier in this chapter, all the previous average theories (ALS) attempted to predict the outcomes for the work-group.

The VDL theorization, by its very nature, evaluates the outcomes for the subordinates individually. What follows is a brief review of the outcome variables explained or attempted to be explained by the VDL theorization.

The VDL approach contends that since members have differing exhanges with their leader, their job-related experiences and behaviors too are different. Satisfaction of the members is the most widely investigated variable in terms of leadership. To some extent, it is a measure of the leader effectiveness. Satisfaction, in this framework, should be more for the IN-Group

members than for the OUT-Group members. In other words, the quality of exhange should be positively related to satisfaction. This is a hypothesis that has received enormous support from the data (Dansereau et al., 1975; Vecchio & Gobdel, 1984). Graen and Ginsburgh (1977) also reported that the quality of exchange (measured in terms of leader acceptance) and role orientation (match between the job characteristics and the work interests of the workers) jointly determined the member's job satisfaction. Scandura and Graen (1984) found that leadership intervention based on the LMX assumptions showed an improvement in the satisfaction of OUT-Group members. This was evaluated by comparing satisfaction of the members before and after the intervention.

A related concept of felt (in)equity by the members has also been explored. Results show that whereas the members with a high quality of exchange do not perceive inequity in their leader's behaviors, those with low quality of exchanges do (Vecchio, Griffeth, & Hom, 1986).

It has been recommended that the turnover of the employees be studied in terms of leadership (Krackhardt, Mckenna, Porter, & Steers, 1981). But, with a few exceptions (e.g., Krackhardt et al., 1981), turnover research has been mainly studied in terms of satisfaction (Graen, Liden, & Hoel, 1982). Hence, there is a need for a shift in the focus of attention to leadership phenomenon to explain employee turnover.

Graen and Ginsburgh (1977) showed that quality of exchange

and role acceptance interacting together predicted employee turnover. Graen, Liden, and Hoel (1982) found LMX to be a better predictor of turnover than ALS--a finding that was replicated successfully in one study (Ferris, 1985) but failed to receive support in the other (Vecchio, 1985). LMX theorization did not predict turnover in some other studies as well (e.g., Vecchio & Gobdel, 1984; Vecchio, Griffeth, & Hom, 1986).

As to the performance of the subordinates, the findings are mixed. Whereas some studies have found support for the LMX model (e.g., Scandura & Graen, 1984, Seers & Graen, 1984), others have failed to do so (e.g., Vecchio, 1982). The performance rated by the leader found support, whereas objective measures of performance did not.

Career progress of the members is another variable that occupies a central position in the VDL model. To study the career progress of the managers, a longitudinal study was initiated in Japan in 1972. Wakabayashi and Graen (1984) reported that a 7-year follow-up showed that the career progress of the members was a function not only of their competence but also of the initial quality of exchange with their leader. This finding received support later in a 13-year follow-up study also (Wakabayashi, Graen, Graen, & Graen, 1988).

Other results also show that the IN/OUT-Group members differ in terms of their perception of the climate (Kozlowski & Doherty, 1989), job related problems and the psychological value of their work (Dansereau et al., 1975), congruence between their present

and desired roles (Graen & Schiemann, 1978), and influence in decision-making (Scandura, Graen, & Novak, 1986).

Thus, in retrospect, although research on outcomes does provide support to the VDL predictions, there are also evidence against the theorization. Although the findings for attitudinal measures of satisfaction, rated performance, etc. receive support, findings for turnover and objective performance are equivocal. As Greenwald (1975) points out, if the conflicting results are not attributable to some obvious statistical artifact or other cause, theoretically they need to be justified.

One probable cause of this fluctuation is the predictor measure. LMX measure has been variable in all the studies and this probably led to the differing results. Thus, renewed efforts need to be made with strong and stable measures of the quality of exchange.

Extensions of the Model

The dyadic model has seen a few extensions to incorporate other related organizational phenomena. The main objective here is to explain global organizational dynamics.

Likert (1961) proposed that, for an organization, it was not enough to have effective units working independently. Organizations are effective on the whole only if these units are linked through a process of mutual influence. His theorization clearly focused on intraunit effectiveness. The leader of a group is the connecting link, as he or she happens to be a member

or subordinate of another group. Cashman, Dansereau, Graen, and Haga (1976) borrowed this notion in their formulation. They had two concepts. One was of course the concept of the leader's exchanges with his or her members (VDL). This they called intraunit differentiation. As an additional measure, they took interunit differentiation which was the standing of the leader vis-a-vis his or her own supervisor. Thus a leader could be in his or her superior's IN or OUT group too. Their analysis showed that the job problems (of the members) relating to work were predicted by interunit differentiation and, the job problems (of the members) concerning relationship were predicted more by intraunit differentiation. Thus, for the members in a work-group, there are linkages which are beyond their control but which have impact upon their organizational experiences. The quality of linking pin (interunit differentiation) of the leaders determines work experience and satisfaction of the subordinates (Graen, Cashman, Ginsburgh, & Schiemann, 1977).

In another extension, the quality of exchange was taken in conjunction with the role orientation. Graen, Orris, and Johnson (1973) suggested that these two dimensions on the job were important for the subsystem functioning. The second dimension of role orientation concerns itself with the work. Specifically, it is a match between the work interests of the members and the characteristics of the task. Thus these two dimensions together determine outcomes, like job performance and job resignation for the members. The joint effect of the two was also shown to

influence productivity and performance of the subordinates (Graen, Novak, & Sommerkamp, 1982).

Seers and Graen (1984) redefined the model. The concept of role orientation was replaced with the job characteristics model (Hackman & Oldham, 1976). The dual-attachment model given by Seers and Graen (1984) is a hybrid of LMX and job characteristics models.

> The hybrid dual attachment model retains the basic form of the job characteristics model. Individual differences in growth need strength are identified as task needs. These task needs are included as a moderator of the effects of the motivating potential of the task on employee responses. The hybrid dual attachment model also includes a paralell formulation for leadership characteristics and individual differences in leadership needs. Leadership need strength is proposed as a moderator of the leader-member exchange on employee responses (Seers & Graen, 1984, p. 285, emphases added).

The extension of the model stresses upon the interactive importance of interpersonal and technical characteristics. Since they are matched for individuals, they take care of individual needs also.

The VDL theorization in both of these extensions is very sound. But there is little empirical evidence to support the extensions. The two aspects of work and people are aptly considered in the dual-attachment model. Whereas the earlier Average Leadership Styles identified these two dimensions, they were basically interpersonal in nature, as both were a part of leader behavior. The dual-attachment model takes care of the two aspects in their pure form. This might be a very useful notion for future leadership research.

Summary

This part of the chapter begins with an alternative understanding of the leadership phenomenon. The model is diagnostic in that it begins with addressing the "how" question. The theory focuses on the leader-member dyad as the unit of analysis. It identifies two types of leader-member exchanges (LMX) for theoretical purposes—high and low quality of exchange.

The conceptualization has sound theoretical roots. It shows how, in the systemic view of organizations, unit differentiation is imperative. It recognizes the dynamic nature of the organization consequently focusing on unstructured tasks. Unit differentiation results when some members collaborate with the leaders on these tasks and others do not. How some members start collaborating is an outcome of typical exchanges that take place at the time of their role development.

Once different kinds of exchanges are recognized, they need to be operationalized. What are the aspects and dimensions of these exchanges that characterize it? The first and the most critical need is to operationalize leader-member exchanges. A review of literature would reveal that, in its short life span, the construct has seen many variations. As a result, there is no one strong scale to measure the quality of exchange.

Another area, which is sorely lacking in research, is the antecedents of the quality of exchange. Besides a handful of studies, these variables have not been thoroughly mapped. Although the "compatibility hypothesis" was stated as early as

1975, it is surprising to note that there are no direct tests of the same.

Although the consequences of the leader-member exchanges have seen relatively more research, the results for some of them are equivocal. The softer measures have been predicted by LMX, but the hardcore performance criteria have not been.

The extensions of the model are worthmentioning. The theoretical groundwork is very viable, but here also one visualizes a lack of empirical data to support the formulations.

On the whole, the theory is viable and very plausible. The basis of unit differentiation and the process through which it (differentiation) occurs are well enumerated. What is lacking is enough empirical support.

THE PROPOSED RESEARCH

To enumerate the objectives of the present research we go back to the theoretical model of role development by the members. One way to test the developmental aspect of the model is through longitudinal studies. This would show how a particular quality of exchange develops. But the stability of the quality of exchange, once it has been crystallized, has been documented well. Thus, one can safely conduct a cross-sectional study at this stage.

To begin with, we enter the organization at one cross section of time and take only those interactions that have had considerable time to crystallize. Thus, one can study the dyadic

exchanges in terms of the model presented. If at the time of entry the relationship in the dyad has stabilized, it means that the role routinization phase is over. The relationship at this stage has both the behavioral and the qualitative aspects. The behavioral elements would involve work behavior of both the leader and the member. This aspect would follow the exchange process to some aspect. It is likely that the leader might be giving more latitude and freedom to some subordinates in return of their increased effort and involvement on the job. The relational aspects do not necessarily follow the exchanges overtly. They will tap the various dimensions of the quality of relationship from both the leader and the member perspectives.

Thus, the first objective of the present study is to develop a multidimensional measure that incorporates the qualitative as well as the behavioral aspects of the leader-member interactions. The measures have to be such that they can be evaluated both by the leader and the members. Different dimensions of quality of interaction have to be taken. The details of the conceptualization and specific objectives have been discussed in Chapter 4.

Once the quality of interaction has been identified, one goes back to see what could have been the possible variables that led to the present quality of exchange? To answer this question, we essentially turn to the first evaluative phase of role taking by the members. At this stage, the leader is identifying the relevant skills and orientations of the members. The relevance

of the orientations of the member is in terms of either leader's own orientation or in terms of the working atmosphere (climate) created by the leader.

The compatibility of the leader characteristics and those of the member can be understood in the exchange framework also. The leader evaluates the member keeping in view the exchanges that are to follow. Thus, the personal orientations of the leader and those of the member also follow the exchange rules. For example, if the leader is power oriented, he or she will look for a subordinate who is less independent and show more dependence on the leader. The leader's power orientation is a valued outcome for the member and the member's dependence is a valued outcome for the leader. For some characteristics, like achievement orientation, it might follow the similarity rule in the exchange framework. The same line of reasoning applies to a test of compatibility between the individual characteristics and those of the organization (i.e., climate). Thus, the next part of the research aims to study some antecedent variables and test the compatibility of these variables for the leaders and the members. These variables are the leader characteristics, member characteristics, leader's perceived climate, and the member's perceived climate. Specific hypotheses are stated in Chapter 5.

Finally, the study aims to examine some outcomes for the members. This is where the predictive utility of the model lies. In the second stage of role making, we identified some resources

that the leader provides to the members. The resources are the outcomes for the members, but they are a part of the exchange. However, these are not the outcomes that we are interested in. For this reason, we make a distinction between the types of outcomes. Besides the outcomes (e.g., latitude, attention, etc.), in the exchange process, there are some outcomes which are the result of the exchange process. Whereas the former outcomes are immediate and negotiated, the latter are not so immediate and are natural croppings of the exchange. We call the former outcomes as proximal outcomes and the latter as distal outcomes. In other words, proximal outcomes characterize the quality of exchange and the distal outcomes are a result of this quality of exchange. For the present purposes, we are mainly interested in distal outcomes. We aim to see how satisfaction, commitment, intent to leave, and perception of unit effectiveness depend on the quality of exchange.

Another outcome, i.e., influence in dyads is a debatable concept. The amount or extent of influence has been taken as a proximal outcome and rightly so. The present research aims to study the actual use of influence strategies that the leaders and the members use to influence each other. This, definitely, is not a part of the exchange process. Thus, whereas the extent of influence is a proximal outcome, the actual use of influence strategies is a distal one. The objective here is to study the actual use of influence strategies by the leaders and the members as a function of quality of interaction. Specific hypotheses

regarding the outcome variables are given in Chapter 6.

A summary of the proposed relationships is presented in Figure 1.2.
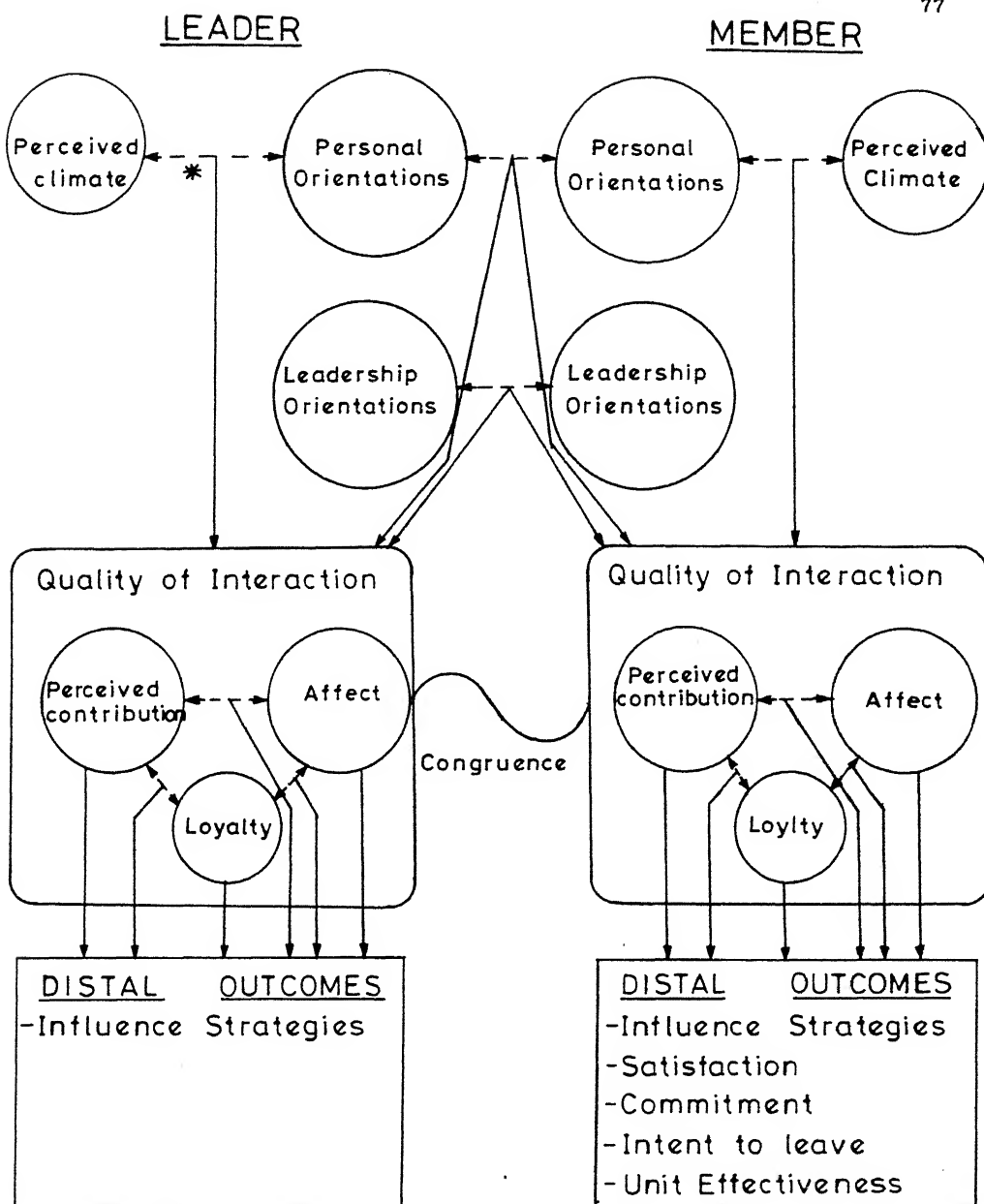
Figure 1·2. Posited relationships among study variables. Broken lines show interaction; solid lines show the effect or relationship; * interaction effects evaluated but not expected to be significant.

Chapter 2

Investigation Strategies

An Overview

The present work involves two studies conducted at two different times. In this chapter, the methodological details of the studies are explicated. The chapter is divided into two parts.

Part one of the chapter contains the details of the first study. Data for this study were collected from four organizations. The characteristic features of these organizations are given in the first section. Followed by this, the second section outlines the characteristics of the participants in terms of leaders' and members' biographical data. The third section deals with the procedure adopted in the study. Finally, the fourth section describes the psychometric properties of the measures used.

The second part of the chapter deals with the details of the second study and is modelled exactly after the first part. This, too, has four sections showing the details of the organization, characteristics of the participants, the procedure followed, and the psychometric properties of the measures used, in the same order. However, the descriptions of the instruments do not follow the same pattern. As most of the measures in the second study were based on the factor structures of Study 1, the same

analysis was not repeated in the second study. Also, the small sample size precluded such an analysis.

STUDY 1

Research Site

The study was conducted in four organizations located in northern India. No attempt was made to pick up the organizations randomly, as they differed from one another in many respects. One major factor that attracted the researcher most was the ownership of the organizations. Keeping this view in mind, two organizations chosen were public sector (Government owned) and two were privately managed. Although all the organizations taken were production units, they were involved in the production of different goods ranging from urea to electrical equipments. A brief description of the organizations is given in the following sub-sections.

Synthetics Limited

It is a large, private sector organization owned and started by one of the biggest business houses in the country. This is the country's first synthetic fibre plant which was set up in the early 1960s. Despite facing several difficulties and obstacles the company has continued to expand.

Presently, the company has eleven divisions: manufacturing nylon filament yarn, tyre cord, polyester filament yarn, polyester staple fibre, acrylic fibre, synthetic fibre machinery,

grey and white cement, cops and other equipments. These divisions are located in the different parts of the country. The data were collected from one of the divisions, i.e., Synthetic Fibre Machinery.

The Managing Director (MD), who is also the owner, is at the apex of the company. Below him are the two General Managers (GMs), under whom are several managers and assistant managers. But, the managers of personnel department and management information systems report directly to the MD. Below the managers are the trainees and/or supervisors. In all, the company employs around 4,000 people, of which around 80 belong to the executive level. The organization takes care of the needs and problems of it's employees.

Financially, the company seems to be doing well. Although the profit-loss account given on March 31, 1987 reveals a loss of Rs. 242.91 lakh when only income (49,472.52 lakh) and expenditure (49,715.43 lakh) are considered. However, taking the transfer from other sources like surplus from the previous year, general reserve, etc., it showed a profit of Rs. 279.11 lakh. For the year 1986 the income-expenditure account showed a profit of Rs. 4,501.49 lakh and, taking the transfer, the company showed a profit of Rs. 4,577.24 lakh. Generally, the company has had a history of earning heavy profits and sharing them with the employees in the form of bonus.

On the whole, the organization is effective both financially and otherwise. Strikes, lock-outs, etc. are rare, thus

indicating psychological well-being of the employees.

The different sections like sales, finance, and accounts of the division were sampled for the present study. The data were collected from all the managerial levels ranging from the GMs to the supervisors.

Urea Limited

It is a public limited concern, but privately owned, established in the 1960s. It is affiliated to a parent company in the U.K. This organization is now in an intensely competitive situation, with the availability exceeding the demand. Mainly a urea plant, it works at a 95% capacity.

The company has several other divisions. The other business sectors of this organization deal with explosives, paints, polythene, rubber chemical, pharmaceuticals, and polyester staple fibre.

The urea production unit is headed by a Chief Executive (CE). The CE is assisted by a General Manager (GM), a General Manager (Works), and a Finance Manager. Works Operation Manager, Chief Engineer, and Senior Personnel Manager report to the GM (Works). Managers are assisted by Deputy Superintendents and the staff. The organization employs about 1,720 work-force, of which around 280 belong to the managerial and supervisory levels.

The organization has a reputation of giving a lot of benefits to it's employees. The overtime rates are very high and the executives are very well-paid. The company takes good care of the needs of the workers. It has sophisticated instruments

and good working environment.

One characteristic feature is the employees unions of the non-managerial staff. They have formed an employees union, a fertilizers union, and a mazdoor union. The unions are strong and strikes and lockouts are frequent.

Financially, the company was not doing too well. The profit-loss statistics was not available for the year 1986-87. Till 1984, the company was making a profit (though only marginally). In recent times, however, it has been running in losses. Because of a draught in 1986 in the country, the market for urea had generally gone down. Also the competition in the urea market is stiff with a host of companies producing urea.

At the time of data collection there was an extensive efflux of the managerial employees from the organization. It was rumoured then that because of the financial condition of the organization, there was going to be a change in the ownership of the organization. In 1988-89, the company was bought by one of the business families in India.

Managers and executives from the topmost level to the supervisory level from the various units of the organization were sampled for the study.

Power Limited

It is a public sector organization set up in the late 1950s. It is involved in the production of power plant equipments. It manufactures a gamut of equipment for thermal, hydro, and nuclear

power plants. The range includes products and systems for power generation, transmission, and utilization. The work ranges from individual equipment to setting up power plants on a turnkey basis.

The company has 13 manufacturing plants situated in different parts of the country. These individual plants have unique manufacturing and testing facilities. The sophisticated facilities at the organization are the state-of-the-art in the manufacturing processes.

The company is headed by a Chairman-cum-Managing Director (MD) who is also a member of the Board of Directors. Under the chairman are the different Directors and Executive Directors.

Technical, Finance, Personnel, and Production divisions have corporate functions (e.g., research and development, finance, taxation, human resources management). Each division is headed by a Director who reports to the MD. The Power and the Industrial systems divisions are business sectors and are headed by a Director each, who also report to the MD. Finally, the different operating units are headed by Executive Directors who once again report to the MD. The organization has a vast reservoir of manufacturing skills and management. The organization employs around 7,500 employees, with around 700 executives.

Financially, the company has been doing very well. In the year 1986-87 (just before the time of data collection), the turnover grew by 15.5% to Rs. 19,939 million. Profit before tax

was Rs. 1,530 million as against Rs. 1,503 million in the previous year. In the field of exports, recognition came from 45 countries--demonstrating the company's high level of technology and overall product quality.

The data for the study were collected from the corporate office of the organization located at a metropolitan city of the country. The respondents in this organization were high level managers, mainly Deputy General Managers and Senior Managers.

Woollen Mills

It is now a public sector organization. The organization has had a long history. It was started in the 1890s by a Britisher under a different name. With mergers over a period of time, the company came to become a part of a bigger corporate. For the first time, in 1937, three Indians appeared on the Board of Directors. In 1955, the ownership was transferred to an Indian industrialist. In 1962, another business family took over. In 1970, part of the big corporation was taken over by the Government. In 1981, the woollen mills too became a public sector organization. The organization manufactures woollen goods like blankets, suit lengths, shawls, etc.

As was mentioned earlier, this company is one of the four subsidiaries of the larger corporation. The organization is headed by a General Manager (GM). The senior managers of accounts, sales, etc. report to the GM. Under the Senior Managers are the Managers and Assistant Managers in the administration.

On the production side, there are different Chief Engineers (CEs) of dying, loom, etc. The Assistant CEs, Senior Engineers, Plant Engineers, and Supervisors follcw the hierarchy, in the same order.   The company employs around 3,300 employees, of which around 250 constitute the different managerial levels.

Financially, the company showed a loss (before depreciation) of Rs. 377.59 lakh for the year 1986-87. The working conditions in the plant are not very good, and the machinery is obsolete.

The managers from different managerial levels and different units participated in the study.

Participants

Altogether 219 executives from four different organizations constituted the sample for Study 1. Almost all the respondents were male (except 3). The participants were taken from the different divisions of the organizations like production, accounts, sales, personnel, etc.

Table 2.1

Organization-wise Split of the Respondents (Study 1)

	Leaders	Members	Total
Synthetics Ltd.	11	40	51
Urea Ltd.	15	30	45
Power Ltd.	15	30	45
Woollen Mills	26	52	78
Grand Total	67	152	219

As will be made clear in the next section, the two perspectives--the leader and the member--are of prime importance to the present investigations. Therefore, a split of the sample, in terms of these two perspectives, is imperative. Organization wise split--the total respondents, number of leaders, and number of members--is given in Table 2.1.

Table 2.2

Means and $\underline{F}$-ratios of Background Variables for Leaders and Members (Study 1)

Variables	Means			
	Leader ($\underline{n}$ = 67)	Member ($\underline{n}$ = 152)	$\underline{F}$ (1,217)	Overall Means ($\underline{N}$ = 219)
Age	48.09	41.00	49.41[a]	43.17
Qualifications*	1.50	1.12	20.40[a]	1.24
Number of Years in the Organization	16.81	13.63	8.31[a]	14.60
Number of Years in the Present Position	3.63	3.20	1.89	3.33
Number of Promotions	4.21	2.95	25.88[a]	3.33
Monthly Income +	5.45	3.60	71.42[a]	4.16

Note. a $\underline{p}$ < .01; * 3-point scale; + 6-point scale.

Of the 219 respondents, 67 (30.59%) were leaders and 152 (69.41%) were members. Table 2.2 depicts the mean scores on background characteristics of the participants. It can be seen

that the leaders were significantly higher than the members in terms of age, educational qualifications, tenure in the organization, number of promotions received, and earned monthly income scores. However, leaders and members did not show any difference in terms of tenure in the present position.

Table 2.3 shows the percentage distributions of the leaders and members on background information. So far as the age of the respondents is concerned, leaders showed less variation, with no leader below the age of 30 and bulk of them in the age range of 45 to 49 years (47.8%). On the other hand, members showed a greater variation in age; the youngest member was 23 years old and most of them were in the age range of 35 to 49 years (71.1%). The same was true of educational qualifications. All the leaders were at least graduates and none of them had a qualification below that. Fifty six (86.6%) leaders had a master's or an equivalent degree. Here also the members showed more variability. Nine (5.9%) were not even graduates and the rest were distributed over the other two categories. Leaders had had a longer tenure in the organization, most of them had their stay in the organization from 10 to 29 years (83.6%). Most of the members (74.4%) had a tenure ranging from 1 to 19 years. The tenure in the present position of both the leaders and the members was mostly 1 to 4 years. Forty eight (71.6%) leaders and 119 (78.2%) members had been in the present position for the above mentioned duration. Most of the leaders (80.6%) had received 3 to 6 promotions, whereas most members (76.9%) had

Table 2.3

Percentage Distribution of Respondents--Leaders and Members--on

Background Variables (Study 1)

Variable	Leader (n = 67)	Member (n = 152)	Overall (N = 219)
Age (in Years)			
29 or less	0.0	10.5	7.3
30 - 34	1.5	12.9	5.0
35 - 39	6.0	20.1	16.4
40 - 44	13.4	24.6	23.3
45 - 49	47.8	21.4	30.1
50 and above	31.3	10.8	17.8
Qualifications			
Below Graduation	0.0	5.9	4.1
Graduation	13.4	37.5	30.1
Postgraduation	86.6	56.6	65.8
Tenure in Organization (in Years)			
4 or less	6.0	13.8	11.4
5 - 9	8.9	13.2	11.9
10 - 14	23.9	29.6	27.8
15 - 19	20.9	17.8	18.7
20 - 24	19.4	15.1	16.4
25 or more	20.9	10.5	13.7
Tenure in Present Position (in Years)			
2 or less	35.8	46.0	42.9
3 - 4	35.8	32.2	33.3
5 - 6	17.9	12.5	14.1
7 - 8	6.0	4.6	5.0
9 or more	4.5	4.6	4.6
Number of Promotions			
None	6.0	5.9	6.0
1 - 2	7.5	33.5	26.6
3 - 4	37.3	43.4	38.0
5 - 6	43.3	14.5	24.3
7 - 8	6.0	2.6	4.6
Monthly Income (in Rupees)			
under 3,000	0.0	12.5	8.7
3,001 - 3,500	1.5	17.1	12.3
3,501 - 4,000	6.0	21.7	16.9
4,001 - 4,500	10.4	12.5	11.9
4,501 - 5,000	10.4	19.1	16.4
Over 5,000	71.6	17.1	33.8

received 1 to 4 promotions only . Leaders had more salary (obviously) than the members. Forty eight (71.6%) leaders received a monthly salary above Rs. 5,000, whereas only 26 (17.1%) members received the same salary.

Obviously, the two samples--leaders' and members'--were significantly different from each other in terms of the background characteristics.

Procedure

The data were collected with the help of a structured questionnaire in the spring of 1988. After seeking entry into the organization, the organizational chart was obtained. All such managers were taken who had at least four people reporting directly to them. These managers were taken as the leaders. The randomly chosen members reporting to leaders for about 2 years were taken as the subordinates. This sampling frame provided leaders an opportunity to evaluate their immediate subordinates and subordinates to evaluate their immediate leaders.

The first section of the questionnaire (see Appendix I) contained Quality of Interaction and Influence Strategy measures. These two measures tapped the interaction between the leader and the individual subordinates. Hence, the leader responded to these two measures for all the subordinates chosen under him (two to four). Similarly, all the members (chosen) under a leader evaluated their interaction with their leader. Thus, if one leader and four subordinates under him are taken, the leader

responds to the two measures for all the four subordinates separately (four times). In contrast, each of the four members evaluated his leader only once. This was done because the objective was to see the dyadic interaction (between a leader and a member) on these two measures. The other sections were related to individual dispositions, perceptions and behaviors and, hence, were filled up only once by each respondent. Thus, for the section of quality of exchange and influence strategies, the $\underline{N}$ was 304, and for the other sections, the $\underline{N}$ was 219. It took approximately 10 to 15 minutes to complete the first section and around 30 to 35 minutes to complete the rest of the questionnaire.

In the beginning, the aim was to sample one leader and four (sometimes three) members under him. In Synthetics Limited, thus, one leader evaluated his interaction generally with four members. In the course of data collection, it was realized that getting so much information from one individual (the leader) had some practical difficulties. Among others, one was the time constraint. Hence, for the next three organizations, the number of subordinates under a leader was limited to two. That is, one leader gave information on first section for two members, separately.

Measures

To test the model in general, and specific hypotheses in particular, a questionnaire was prepared which consisted of

various tests and measures. Most of the measures were taken from the existing literature. The questionnaire was divided into five sections (see Appendix I). Section I contained items on quality of exchange and influence strategies. Sections II and III contained items on personal attributes and perceived climate, respectively. Section IV comprised outcome variables—satisfaction and commitment. Finally, in Section V, the biographical information and intent to leave items were included.

At the outset, almost all the measures were subjected to a varimax rotated factor analysis (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975). Nie et al. (1975) have described five methods of factoring, of which the two most common methods are: Principal Factoring without Iteration (PA1) and Principal Factoring with Iteration (PA2). In the present study, all the measures were analyzed using the latter method. This was done for two reasons. First, it automatically replaces the main diagonal elements of the correlation matrix with communality estimates, thereby automatically giving the so-called inferred factor. Secondly, it employs an iteration procedure for improving the communality estimates. The varimax rotation emphasizes on cleaning up the factors rather than the variables.

The items and the factors retained, following the factor analysis results, were selected on the following two criteria. Only those factors were retained that had an eigenvalue generally greater than or equal to 1.00. Then, within a factor only those items were taken that had a factor loading greater than or equal

to .30 on the defining component and cross-loadings generally less than or equal to .25. Those items that loaded heavily on more than one factor were included in all the factors that they loaded on.

Following is a description of the measures used in the study.

Quality of Exchange (QEx)

The quality of exchange employed two different scales—Leader Member Exchange and Quality of Interaction.

Leader-Member Exchange (LMX) Measure

One of the measures used in the study was the 5-item version of the Leader-Member-Exchange (LMX) scale (Graen, Liden, & Hoel, 1982). The responses were taken only from the subordinates wherein they evaluated their immediate supervisor (leader) on a 4-point scale. Thus, the number of respondents for this measure was 152. The factor analysis results of the five items yielded one clear factor. The five items had factor loadings of .35, .57, .55, .34, and .74. The scale showed a fairly high reliability coefficient of .81. The mean and SD of the scale were 14.81 and 3.30, respectively.

Quality of Interaction (QI)

Since the present research is centered around the construct of quality of exchange, a new measure—"Quality of interaction" scale—was developed in this study to measure the quality of exchange between a leader and a member. Because of the

centrality of this construct in the present research, it has been given a detailed treatment in Chapter 4.

Personal Orientations (PO)

The Manifest Need Questionnaire (MNQ) developed by Steers and Braunstein (1976) was used to measure the personal needs. This instrument is designed to measure four needs—Achievement, Affiliation, Autonomy, and Dominance—through behaviorally based items with specific reference to work settings.

The scale consisted of 20 items, with 5 items in each of the four subscales. Five items were reverse-scored. The respondents were asked to rate on a 7-point scale ($\underline{1}$ = never; $\underline{7}$ = always) as to how frequently each of the statements most accurately described their behavior at work.

Since the psychometric properties of the subscales are not available in the Indian setting, it was considered appropriate to run a varimax rotated factor analysis on the item responses. While performing this statistical analysis, some additional data were provided by Lakhtakia (1990), thus making an $\underline{N}$ = 444. The analysis yielded three neat and meaningful factors, explaining a total of 78.2% of the variance. The three factors that emerged were named Achievement (PA), Independence (PI), and Power (PP). The fourth factor of relationship did not emerge as an independent configuration. Factor loadings obtained are presented in Table 2.4.

Table 2.5 shows the descriptive statistics, intercorrelations, and reliability coefficients of the scales. The scales exhibited reliability coefficients well above .50 suggested by Nunnally (1978) as a minimum level for acceptable reliability. The correlations among the factors ranged from .17 to .52, with an average correlation of .37.

Table 2.4

Factor Loadings Obtained--Personal Orientations Measures (Study 1)

	Items	Factor 1	Factor 2	Factor 3
10.	I try very hard to improve on my past performance	.60	.01	.05
11.	I try to avoid any added responsibilities on my job	.39	-.28	.02
14.	I do my best work when job assignments are fairly difficult	.53	.13	.02
16.	I try to perform better than my coworkers	.59	.10	.19
17.	I strive to gain more control over the events around me	.46	.07	.41
2.	I go my own way regardless of the opinion of others	.06	.44	.13
5.	In my work assignments, I try to be my own boss	.16	.33	.34
7.	I disregard rules and regulations that hamper my personal freedom	-.06	.46	.05

8.	I try my best to work alone on a job	.12	.67	.06
3.	I strive to be in command when I am working in a group	.04	.17	.75
6.	I seek an active role in the leadership of a group	.21	.04	.46

Eigenvalue	3.05	.61	.99
Percentage of Variance	42.20	22.30	13.70

Note.   N = 444; Factor 1 = Achievement; Factor 2 = Independence; Factor 3 = Power.

For the present sample too, the reliability coefficients are well above the cut-off mark. The intercorrelations range from .32 to .56 (average r = .46), showing a fair amount of scale independence.

Relationship did not emerge as an independent factor. It has been reported that affiliation gets in the way of effective management (McClelland & Winter, 1969). Thus, it is possible that affiliation or relationship is more of a behavioral dimension (e.g., relationship oriented leader behavior). As a personal need, probably, it is not very relevant to work situations. At the other extreme, as Indian society is believed to be a collectivists society (Hofstede, 1980), affiliation is probably more of a meta-value and less of a personal orientation.

Table 2.5

Descriptive Statistics, Reliabilities, and Intercorrelations of Personal Orientations Measures (Study 1)

		1	2	3	M (N = 444)	SD	Alpha
1.	Achievement	x	17	52	27.8	4.2	66
2.	Independence	32	x	44	14.8	4.4	59
3.	Power	56	49	x	19.8	3.9	67
	M (N = 219)	28.3	15.6	19.7			
	SD	3.9	4.4	4.0			
	Alpha	70	64	69			
	No. Items	5	4	4			

Note.   Decimal points in correlation matrix and alpha are omitted; Correlations above the diagonal are for combined data (N = 444) for which required rs are .10 and .12 at p < .05 and p < .01, respectively; Correlations below the diagonal are for the present sample (N = 219) for which required rs are .14 and .18 at p < .05 and p < .01, respectively.

Organizational Climate (OC)

The concept of climate no doubt has been proved very useful, but at the same time it has evoked tremendous controversies. Unit of analysis is one major issue. The question is whether one is measuring psychological (perceived) climate at the individual level or the attributes of the organization as a whole

(structural or objective climate). These two levels of analysis form the perceptual and structural approaches, respectively, to the study of climate (e.g., Ansari, 1980; Ansari, Baumgartel, & Sullivan, 1982). Whereas some (e.g., Guion, 1973; James & Jones, 1974) question the validity of perceptual measures, others (e.g., Hellreigel & Slocum, 1974) favor them on the ground that objective characteristics only indirectly influence the organizational participants if at all they do. For the present purpose, the psychological climate, which is the individual perception of the members of the organization, is of interest.

The Manifest Need Questionnaire (Steers & Braunstein, 1976) was modified to represent the climate (or presses) of the organization. Since the aim was to see a match between the personal orientations of the members and their perception of the climate, the personal orientation measures were modified to reveal the equivalent presses (climate) of the organization. The scale consisted of 20 items (see the previous section for details). The respondents were asked to evaluate the extent to which each item was true to their organization on a 7-point scale (1 = to almost no extent; 7 = to a very great extent).

Before subjecting the data to a factor analysis, additional data were taken from Lakhtakia (1990), making the N = 444. The analysis constrained to three interpretable factors, explaining a total of 94.7% of the variance. The factor loadings obtained are reported in Table 2.6.

The first factor, <u>Achievement</u> (CA), contained items dealing with the standards of performance and the pressure put by the organization to meet these demands. The second factor, <u>Independance</u> (CI), contained items showing the opportunities provided for independent thoughts and actions by the organization and the freedom on the job. The third dimension, <u>Power</u> (CP), contained items showing the extent of power yielded by the organization over the individual members. It specifically asked the extent to which the organization controlled and directed the activities of the members.

Table 2.6

Factor Loadings Obtained—Organizational Climate Measures (Study 1)

	Items	Factor 1	Factor 2	Factor 3
22.	In this organization, there is a feeling of pressure to continually improve individual and group performance	<u>.50</u>	.11	.18
27.	This organization stimulates and approves of innovation and experimentation	<u>.74</u>	.27	.03
28.	In this organization, we set fairly high standards for performance	<u>.67</u>	.25	.21
30.	In this organization, it is upto us to decide how our job should best be done	.17	<u>.67</u>	.12

35.	In this organization, we are free to set our performance goal	.20	.70	.09
36.	In this organization, there are opportunities for independent thoughts and action on our job	.31	.74	.10
38.	In this organization, we have a great deal of freedom to decide how we do our job	.19	.82	-.02
29.	This organization prefers to be its own boss, even where it needs assistance, or where a joint effort is needed	.01	.06	.58
32.	Status symbols are especially important for this organization and it uses them to gain influence over others	.04	.02	.57
40.	This organization provides a lot of power and control to upper level management	.14	.13	.30
	Eigenvalue	6.33	1.31	0.94
	Percentage of Variance	69.8	14.5	10.4

Note.   N = 444; Factor 1 = Achievement;   Factor 2 = Independence; Factor 3 = Power.

Table 2.7 shows the descriptive statistics and reliability coefficients of and intercorrelations among the three factors for combined data (N = 444) and the equivalent statistics for the data of present study (N = 219). It can be seen that the reliability of the third factor, Power, is just below the

required level for the combined data ($\underline{N}$ = 444); however, it
touches the acceptability mark of .50 for the data of the present
study. The intercorrelations among the factors are substantially
low (average $\underline{r}$ = .26, $\underline{N}$ = 219), indicating a reasonable amount of
scale independence.

Table 2.7

Descriptive Satististics, Reliabilities, and Intercorrelations of
Climate Measures (Study 1)

	1	2	3	M (N = 444)	SD	Alpha
1. Achievement	x	45	14	13.9	3.9	84
2. Independence	46	x	03	17.7	5.4	88
3. Power	25	07	x	14.2	3.1	50
M (N = 219)	13.2	16.4	13.6			
SD	3.7	5.6	3.4			
Alpha	73	85	47			
No. Items	3	5	3			

Note.   Decimal points in correlation matrix and alpha are
omitted; Correlations above the diagonal are for the
combined data ($\underline{N}$ = 444) for which required $\underline{r}$s are   .10
and .12 at $\underline{p}$ < .05 and $\underline{p}$ < .01, respectively;
Correlations below the diagonal are for the present
sample for which required $\underline{r}$s are .14 and .18 at $\underline{p}$ < .05
and $\underline{p}$ < .01, respectively.

For climate too, relationship did not emerge as an independent factor. Since MNQ has been modified to represent climate, this failure too is probably because of the same reason as for the personal orientations.

Influence Strategies (IN)

Forty-seven single-statement items were drawn from the available literature (Ansari, 1990; Falbo, 1977; Falbo & Peplau, 1980; Kipnis, Schmidt, & Wilkinson, 1980) to tap the respondents' upward and downward influence strategies. The respondents rated each item on a 7-point scale (1 = never; 7 = always) estimating the frequency with which they used it to influence the target person (identified as immediate superior/subordinate) at work.

The analysis of the combined data--from both the leader and the member perspectives (N = 304)--disclosed five common factors (Table 2.8). A total of 84.1% of the variance was accounted for by the 24 significant items in the factor matrix. The extracted factors are described below.

The first factor had the elements of support from friends, higher ups and others. This was named Informal External Support (IES).

The second factor had the elements of flattery, praise, making the target feel important, etc. This was termed, Ingratiation (I).

The third factor comprised personal favors on an exchange basis. Hence, this was labeled, Personalized Exchange (PE).

The fourth factor clearly contained items on persuading the

Table 2.8

Factor Loadings Obtained--Influence Strategy Measures (Study 1)

Items		Factor				
		1	2	3	4	5
1.	Call a staff meeting to back your request	.46	.21	.04	.07	.09
20.	Obtain informal support of higher ups	.67	.26	.10	.16	.11
26.	Bring some friends along to back your request	.53	.11	.01	.21	.07
30.	Get the support of some higher up to back your request	.81	.06	.03	.24	.05
35.	Get everyone else to agree with you before you make the request	.54	.29	.03	.13	.14
39.	Refer the matter to higher authority if the situation so demands	.64	.20	-.07	.12	.20
3.	Praise him/her with superlatives	.15	.62	.15	.07	.13
7.	Get your way by making him/her feel that it was his/her idea	.16	.64	.06	.24	.12
19.	Make him/her feel important	.09	.84	.03	.14	.05
27.	Even when you know you would not use his/her idea you consult him/her	.24	.47	.03	.10	.08
32.	Use the words that make him/her feel important	.16	.78	.02	.06	.10
11.	Offer an exchange of favor	.02	.17	.78	.11	.07

22.	Help him/her even in personal matters	.02	.32	.62	.06	.17
24.	Remind him/her of the past favors you did for him/her	.19	.28	.64	.20	.03
36.	Remind him/her how hard you had worked and it will only be fair for him/her to help you now	.27	.11	.42	.13	.02
44.	Offer some personal sacrifice in exchange (e.g., doing part of his/her or others' job, etc.)	.04	.05	.75	.06	.18
8.	Repeatedly ask him/her until he/she gives in	.22	.08	.13	.77	.03
28.	Repeatedly persuade him/her to comply with your arguments as they are the need of the time	.15	.08	.14	.59	.25
47.	Go on asking persistently till he/she does what you want	.29	.11	.06	.65	.04
21.	Sometimes tell him/her the reasons for making the request	.08	.09	.21	.03	.76
31.	Tell exactly why you need his/her help	.10	-.02	.11	-.03	.73
38.	Tell him/her the reasons why your plan is the best	.13	.04	.28	.09	.55
41.	Argue your points logically	.19	.07	.20	.07	.59

Eigenvalue	8.44	5.40	3.59	2.29	1.22
Percentage of Variance	33.9	21.7	14.4	9.2	4.9

Note. $\underline{N}$ = 304; Factor 1 = Informal External Support; Factor 2 = Ingratiation; Factor 3 = Personalized Exchange; Factor 4 = Persuasion; Factor 5 = Reasoning.

target person. This was, therefore, named, <u>Persuasion</u> (PR).

Finally, the last factor had rationality at the heart of all the items, and was called, <u>Reasoning</u> (R).

Table 2.9

Descriptive Statistics, Reliabilities, and Intercorrelations of Influence Strategy Measures (Study 1)

	IES	I	PE	PR	R
IES	.80				
I	.39	.81			
PE	.15	.02	.84		
PR	.18	.08	.34	.78	
R	.42	.08	.29	.08	.81
<u>M</u>	15.46	17.39	17.32	10.25	20.70
<u>SD</u>	6.52	6.35	7.56	3.72	4.20
No. Items	6	5	6	3	4

<u>Note</u>. r (302) = .11 at p < .05; r (302) = .15 at p < .01; IES = Informal External Support; I = Ingratiation; PE = Personalized Exchange; PR = Persuasion; R = Reasoning; Diagonal enteries indicate coefficients alpha.

The descriptive statistics, reliability coefficients, and the intercorrelations of the subscales are given in Table 2.9. The reliabilities are substantially high and intercorrelations (average r = .20) substantially low, thereby showing reliable and sufficiently independent subscales, respectively.

The factor analysis was repeated for the leader and the member separately. From both the perspectives, the same five dimensions emerged. Intercorrelations among the factors for both the perspectives were similar to the combined data, thus showing scale interdependence. However, from the leaders' perspective, two additional factors—Assertion (A) and Showing Expertise (SE) —were obtained. Means, SDs, reliability coefficients, and number of items for the leader and member data are given in Table 2.10.

Table 2.10

Scale Characteristics and Reliability Coefficients of Influence Strategy Measures for Leaders and Members Separately (Study 1)

	Leader				Member			
	Alpha	M	SD	No. of Items	Alpha	M	SD	No. of Items
IES	.83	15.14	6.38	6	.80	15.46	6.52	6
I	.87	15.82	6.41	5	.81	17.39	6.35	5
PE	.86	18.35	7.73	6	.84	17.32	7.56	6
PR	.79	10.67	3.69	3	.78	10.25	3.72	3
R	.84	20.54	4.36	4	.81	20.71	4.20	4
A	.54	8.14	2.29	2	−	−	−	−
SE	.84	26.68	5.85	6	−	−	−	−

Note. N = 152; IES = Informal External Support; I = Ingratiation; PE = Personalized Exchange; PR = Persuasion; R = Reasoning; A = Assertion; SE = Showing Expertise.

Satisfaction (SA)

A 16-item scale included satisfaction with different aspects of the job. The respondents were asked to indicate how satisfied they were with these aspects on a 7-point scale (1 = very dissatisfied; 7 = very satisfied).

Factor analysis yielded two neat factors. The results of the analysis are reported in Table 2.11. The two factors together explained a total of 90.7% of variance.

The first factor had elements of friendliness, respect received and job security, and was labeled, Extrinsic Satisfaction (ES).

The second factor contained items reflecting the growth opportunity, challenge and advancement on the job, and was called, Intrinsic Satisfaction (IS).

Extrinsic and Intrinsic satisfaction scales showed adequate reliability coefficients of .67 and .85, respectively, and were only moderately correlated ($r_{(217)}$ = .45), revealing scale independence. The means and SDs of the two factors can also be looked up in Table 2.11.

Commitment (CO)

The organizational commitment scale (Porter & Smith, 1970) originally consists of 15 items. The present study employed only nine items of this scale (including two negative ones). The six items that represented intent to leave dimension were left out,

Table 2.11

Factor Loadings Obtained--Satisfaction Measures (Study 1)

	Items	Factor 1	Factor 2
2.	The friendliness of the people you work with	.69	.18
5.	The respect you receive from the people you work with	.67	.13
10.	The amount of job security you have	.50	.24
11.	The amount of personal growth and development you get in doing your job	.22	.77
12.	The feeling of worthwhile accomplishment you get from doing your job	.31	.78
14.	The amount of challenge in your job	.27	.72
16.	The chances for advancement on your job	.06	.60
Eigenvalue		6.36	1.32
Percentage of Variance		75.1	15.6
M		16.38	18.45
SD		2.88	5.15

Note.   N = 219; Factor 1 = Extrinsic Satisfaction;
Factor 2 = Intrinsic Satisfaction.

as this outcome dimension has received a separate treatment in the present research.

The respondents were asked to indicate their agreement/disagreement with each item on a 7-point scale (1 = strongly disagree; 7 = strongly agree). A varimax rotated factor analysis yielded one single factor involving all the 9 items, with factor loadings of .41, .68, .30, .64, .57, .33, .57, .34, and .43. The index of coefficient alpha was .87, with a mean of 43.95 and an SD of 10.38.

Intent to Leave (IL)

Intent to leave was measured through a two-item scale (Mayes & Ganster, 1982). One item was positive and the other was reverse-scored. In both the items, rated on a 5-point scale, the respondents were asked about their intention to leave or stay in the organization in the near future.

The two items showed a very high correlation of .98. The scale had a mean of 2.26 and an SD of .83.

STUDY 2

The data for the second study were collected with the main objective of studying the within-group variations from the subordinate perspective. In other words, the aim was to see whether different subordinates under one leader (a work-group) perceive the leader behavior differently. All the same, some of the hypotheses were retested to check the validity of the Study 1 findings.

Only one organization was taken, as this study was an extension and validation of Study 1. Also practical constraints of time precluded an employment of a bigger sample. In addition, all the measures used in the study were based on the factor analysis results of Study 1.

Research Site

Only one public sector organization, located in the north-eastern part of the country was taken. The details of the organization are as follows.

Fertilizer Division

It is a public sector organization established in the early 1960s and involved in the production of urea from naptha. It has four divisions located in different parts of the country. All the divisions are involved in the production of fertilizer. The data were collected from one of the divisions of the organization.

This division is headed by a General Manager (GM). The Deputy GM (administration) and the Deputy GM (factory) report to the GM. The Chief Engineers of different departments--technical services, civil, production, instruments, electrical, and mechanical--report to the Deputy GM (factory). Below the different Chief Engineers are the Additional Chief Engineers. Deputy Chief Engineers report to the Additional Chief Engineers. Assistant Chief Engineers report to the Additional Chief Engineers. Under the Assistant Chief Engineers are plant

managers, assistant engineers, etc. Under the Deputy GM
(administration) is a Chief Executive Officer. The Finance
Manager, Chief Personnel Officer, Vigilance Officer and the Chief
Medical Officer all report to the Chief Executive Officer. These
managers take care of their respective departments with the help
of senior officers. The organization employs around 2,200
employees, with around 300 executives and managers.

Although the employees in the organization are well-paid,
the unit is grossly inefficient. Lock-outs and strikes are
frequent. Mistrust among the managers is perceptible. All the
same, employees turnover and absentecism are marginal.

Financially, the organization has been a sick unit. The
instruments are obsolete. It has been running in losses for the
last 15 years. For the year 1987-88, the company accounts showed
a net loss of Rs. 42.67 crores after taxes.

Managers and officers from topmost level (Deputy GM) down to
supervisors constituted the sample in the present study.

Participants

In all 122 managers and executives from the above mentioned
organization participated in the study. They belonged to
different sections of administration and production (factory)
units. Of the 122, 26 (21.31%) respondents were leaders and 96
(78.69%) were members.

Table 2.12 displays the mean scores of leaders, members, and
total respondents on the background data. Leaders were

Table 2.12

Means and F-ratios of Background Variables for Leaders and Members (Study 2)

| Variables | Means | | | Overall Means |
	Member (n=96)	Leader (n=26)	F(1,120)	(N=122)
Age	47.06	50.38	9.20[a]	47.77
Qualifications*	1.00	1.20	9.24[a]	1.06
Number of Years in the Organization	17.79	19.96	2.04	18.25
Number of Years in the Present Position	4.46	3.69	1.99	4.29
Number of Promotions	4.54	3.71	4.54[b]	4.36
Monthly Income+	3.96	5.62	54.09[a]	4.31

Note. a $p < .01$; b $p < .05$; * 3-point scale; + 6-point scale.

significantly higher than the members on age, educational qualifications, number of promotions received, and the salary drawn. However, tenure in the organization and in the present position did not reveal any significant differences.

Table 2.13 depicts the percentage distributions of leaders and members on the background data. In this sample, too, the leaders showed little variability on age, with most of them (57.7%) falling in the range of 50 to 54 years and all of them in the range of 40 to 59 years. Members, on the other hand, were

Table 2.13

Percentage Distribution of Respondents—Leaders and Members—on Background Variables (Study 2)

Variable	Leader (n = 26)	Member (n = 96)	Overall (N = 122)
Age (in years)			
34 or less	0.0	2.0	1.6
35 - 39	0.0	6.3	4.9
40 - 44	3.8	19.8	16.4
45 - 49	30.8	39.6	37.7
50 - 54	57.7	22.9	30.3
55 - 59	7.7	9.4	9.0
Qualifications			
Below Graduation	0.0	2.1	1.6
Graduation	0.0	26.0	20.5
Postgraduation	100.0	71.9	77.9
Tenure in Organization (in years)			
9 or less	3.8	9.4	8.2
10 - 14	11.5	24.0	21.3
15 - 19	30.8	21.9	23.8
20 - 24	23.1	27.1	26.2
25 - 29	23.1	12.5	14.7
30 or more	7.7	5.2	5.7
Tenure in present position (in years)			
3 or less	57.7	35.4	40.2
4 - 6	30.8	52.1	47.5
7 - 9	7.7	5.2	5.7
10 or more	3.8	7.2	6.6
Number of promotions			
None	0.0	2.1	1.6
1 - 2	15.4	25.0	22.9
3 - 4	38.5	42.7	41.8
5 - 6	30.8	26.0	27.0
7 or more	15.3	4.1	6.5
Monthly Income (in Rupees)			
Under 3,000	0.0	1.0	0.8
3,001 - 3,500	0.0	9.4	7.4
3,501 - 4,000	0.0	21.9	17.2
4,001 - 4,500	7.7	31.3	26.2
4,501 - 5,000	23.1	32.3	30.3
Over 5,000	69.1	4.2	18.0

more variable on age, with 59.6% falling in the age range of 40 to 49 years. So far as the educational qualifications is concerned, all the leaders had a master's or an equivalent degree. Among the members, 26% were graduates too. Most of the leaders (69.4%) had received 3 to 6 promotions, whereas most members (67.7%) had received 1 to 4 promotions only. Again, the leaders received more salary, with 69.1% getting over Rs. ·5,000, whereas only 4.2% of the members received the same salary.

Procedure

As mentioned earlier, the data were collected only from one organization in the spring of 1989. The procedure of data collection was the same as in Study 1. From the organizational chart of the organization, all such managers were taken who had around 4 subordinates reporting to them for about 2 years. All the four subordinates under a leader were taken as the respondents.

The leaders gave their responses on the sections of personal attributes, perceived climate, self-reported leadership styles, and biographical information. The subordinates responded to all the sections of the questionnaire. Thus, for the measures of personal orientations, perceived climate, and biographical information, the N was 122 (both the leaders' and the subordinates' responses); for the other sections, the N was 96 (only subordinates' responses). The self-reported leadership style measures were only from the leaders; hence, the N was 26 for this section.

Measures

Most of the measures used in this study were taken directly from Study 1, with a few exceptions. The details of the questionnaire (see Appendix II) are as follows. Sections I and II contained items on personal attributes and perceived climate, respectively. The third section contained biographical information. The fourth section for the leaders had items of self-reported leadership styles; for the members it contained style preferences. Section V contained measures of quality of

Table 2.14

Scale Characteristics, Coefficients Alpha, and Intercorrelations of Personal Orientation Measures (Study 2)

	PA	PI	PP
PA	.75		
PI	.08	.68	
PP	.43	.11	.80
M	26.79	17.63	14.60
SD	4.23	4.62	3.70
Number of items	5	4	4

Note. Diagonal entries indicate coefficients alpha; $r(120)$ = .14 at $p < .05$; $r(120) = .18$ at $p < .01$; PA, PI, and PP are Achievement, Independence, and Power orientations, respectively, of the respondents.

exchange taken from existing literature (in terms of Attention and Latitude). Section VI contained items of quality of interaction as measuring exchange. Finally, the seventh section contained the three outcome variables--satisfaction, commitment, and unit effectiveness.

The three factors--Achievement, Independence, and Power-- of **Personal Attributes** that emerged in the first study were taken in this study as it is. The reliability coefficients, mean, $\underline{SD}$, number of items of and intercorrelations among factors are given in Table 2.14. The reliability coefficients are fairly high and intercorrelations low enough.

Table 2.15

Scale Characteristics, Coefficients Alpha, and Intercorrelations of Climate Measures (Study 2)

	CA	CI	CP
CA	.76		
CI	.55	.87	
CP	.24	−.34	.51
$\underline{M}$	11.69	15.44	13.93
$\underline{SD}$	3.96	5.63	3.29
No. of Items	3	4	3

Note. Diagonal entries indicate coefficients alpha; $\underline{r}(120) = .14$ at $\underline{p} < .05$; $\underline{r}(120) = .18$ at $\underline{p} < .01$; CA, CI, and CP are Achievement, Independence, and Power Orientations of the climate, respectively.

Similarly, the three factors--Achievement, Independence, and Power of **Perceived Climate**--were also taken a priori. The scale characteristics, reliability coefficients, and intercorrelations can be looked up in Table 2.15. As mentioned earlier, for both sections, the N was 122.

The self-reported **Leadership Style** (LS) was taken from Ansari (1990) and Sinha (1987). The three styles of leadership-- Authoritarian (F), Participative (P), and Nurturant-task (N)-- were of interest and only items related to them were taken. The respondents were asked to evaluate how frequently the statements were true to them, on a 7-point scale (1 = never, 7 = always).

Table 2.16

Scale Characteristics, Coefficients Alpha, and Intercorrelations of Self-Reported Leadership Style Measures (Study 2)

	LS(N)	LS(P)	LS(F)
LS(N)	.64		
LS(P)	.31	.77	
LS(F)	.22	−.03	.90
M	28.95	24.63	22.27
SD	4.31	5.79	7.26
No. of Items	5	5	5

Note. Diagonal entries indicate coefficients alpha; r(24) = .39 at p < .05; r(24) = .50 at p < .01; LS(N), LS(P), and LS(F) are, respectively, the nurturant-task, participative, and authoritarian leadership styles.

Since the N for this section was very small, the use of factor analysis was ruled out. The three styles--Authoritarian, Participative, and Nurturant-Task--were taken a priori. The three factors have been found to be important in the Indian setting. The relevant statistics are given in Table 2.16.

The subordinates responded to their **Preference for Leadership Style** (SP). The brief descriptions of the three styles--Authoritarian (F), Participative (P), and Nurturant-Task (N)--were based on the above mentioned sources. Respondents evaluated the three through paired comparisons. The means for the preference of F, N, and P are 2.32, 3.33, and 3.35 and the SDs for the three are 1.54, 1.39, and 1.67, respectively.

The **Quality of Exchange** was measured through **Attention** (AT) and **Latitude** (LT) measures used by Dansereau, Alutto, and Yammarino (1984). The original measure of Attention contained 11 items of which only 5 were chosen. Similarly, for Latitude, of the 11 original items, 5 were chosen. All such items that were thought to overlap directly or indirectly with the quality of interaction measure were left out. For the Attention measure the respondents evaluated the amount of attention given to the subordinate by the leader, on a 5-point scale (1 = almost none; 5 = a great deal). Taken only from the subordinate perspective, the N was 96. For latitude, the respondents evaluated the prabability of their leader giving the latitude on a 4-point scale (1 = no chance; 4 = certainly). All the items of attention measure when subjected to a factor analysis clustered

Table 2.17

Scale Characteristics, Reliability Coefficients, and Intercorrelations of Influence Strategy Measures (Study 2)

	IES	I	PE	PR	R
IES	.86				
I	.25	.85			
PE	.41	-.12	.87		
PR	-.29	-.09	.17	.79	
R	-.58	-.07	-.20	.32	.86
M	18.07	14.65	12.85	21.85	20.19
SD	8.04	6.38	4.46	7.83	5.34
No. of Items	6	5	6	3	4

Note.   Diagonal entries indicate the coefficients alpha; $r(94)$ = .19 at $p < .05$; $r(94)$ = .26 at $p < .01$; IES = Informal External Support; I = Ingratiation; PE = Personalized Exchange; PR = Persuasion; R = Reasoning.

around one factor. Similarly, latitude also yielded one factor. Attention and latitude showed reliability coefficients of .91 and .90, means of 15.02 and 12.65, SDs of 5.56 and 3.92, and an intercorrelation of .82. Although the correlation between the two is high, the two are treated as independent factors. **Quality of Interaction** was the third measure of quality of exchange which is detailed in Chapter 4.

The **Influence Strategy** measures were evaluated only from the subordinate perspective. Therefore, the five factors that

emerged in Study 1 were taken as it is. The relevant statistics with respect to influence strategies are given in Table 2.17.

The outcome variables of **Satisfaction** and **Commitment** too were taken from Study 1. Extrinsic satisfaction, Intrinsic satisfaction, and Commitment showed high reliabilities--.88, .84, and .88, respectively. Their means were 14.37, 15.96, and 38.41 and SDs were 4.07, 5.13, and 10.52, respectively. The intrinsic and extrinsic satisfaction subscales showed a correlation of .61.

The **Unit Effectiveness** (UE) scale (Mott, 1972) contained 8 items. The subjects were asked to report their perceptions of their work unit on a 5-point scale estimating it's effectiveness. All the nine items were taken as constituting one single scale. Factor analysis yielded one factor and all the items loaded heavily on this factor. The nine items had factor loadings of .69, .69, .68, .67, .76, .74, .68, and .62. The scale showed an impressive reliability coefficient of .90, a mean of 22.94, and an SD of 8.39.

Chapter 3

Analytical Strategies

An Overview

The VDL theorization emerged as a reaction to the average assumptions of other leadership theories. As has already been mentioned, average theorists (ALS) presumed that the work-group under a leader (in terms of the subordinates) is a homogeneous entity--an assumption which the VDL theorists refused to take as an axiom. Hence, the VDL theorists tested and, to some extent, successfully theorized that the work-unit under a leader gets differentiated. Stated differently, whereas ALS theorists treat work-group under a leader as one whole entity, the VDL theorists view a work-group as differentiated into parts. Essentially, the ALS-VDL controversy involves the establishment of the appropriate level for the study of leadership. Dansereau, Alutto, and Yammarino (1984) have given an effective method of resolving this issue (of establishing the actual level) through data analysis. They call this method, the <u>Varient Approach</u>. The present work, too, aims to establish the level at which leader behavior is located. The first part of the chapter contains the details of the varient approach used to establish the levels. The discussion draws heavily upon Dansereau et al. (1984). The first section in this part deals with the concept behind this approach. Data analysis techniques are discussed in the next section, followed by tests of significance. An

empirical illustration is given in the next section to clarify the approach. Finally, the last section of this part contains an extension of this analytical technique to the use of multiple regression analysis.

The next part of the chapter contains a breif description of other traditional analyses—ANOVA, hierarchical regression, and stepwise regression—in the same order. Since these analyses are age-old and much used, the details are not given here. They are discussed only in the context of the present study.

THE ESTABLISHMENT OF LEVELS: THE VARIENT APPROACH

Researchers have viewed individuals in organizations in different ways depending upon their conceptualizations and needs. Individual human beings have been studied as independent entities or persons, as double interacts or dyads (Weick, 1979), as interdependent on a few others or groups, or as total organization or collectivities. Generally, psychologists are supposed to focus on individuals, social psychologists on dyads and groups, and sociologists on collectivities (Van de Ven & Astley, 1981). These are the four broad levels which are much recognized. The varient approach goes a step further and identifies the possibility of two additional levels in each of these four levels. Each level is understood either as a whole entity or as composed of parts. We will take up this aspect in detail in the following sections.

Besides establishing the status at one level, the varient approach incorporates the passibility of "multiple-level" analysis. This analysis explains how one finding has implications for different levels. Here, more than one level of analysis is of interest. Theoretically, homology and discontinuity are two extreme positions of levels (Hannan, 1971). The former position believes in the consistency of results across levels. Essentially, a continuity is beleived to exist (in the processes) from most micro-levels (e.g., a dyad) to broad macro-levels (e.g., the nations), so that the results from one level can be generalized to all levels (Parsons, 1956). On the contrary, the processes are considered to be existent at some levels but not at other levels, according to the discontinuity thesis. Either the relationships at higher levels are not applicable at lower levels or the opposite is true. Thus, despite the seeming similarity between the processes at the informal group level and society at large, the former cannot be taken as a microcosm of the latter. The varient paradigm through multiple-level analysis provides a method to test these various metatheoretical positions. Anyway, since multiple-level analysis is not used in the present work, we will focus only on single-level analysis.

Single Level of Analysis for One Variable

As mentioned before, the varient approach provides with an opportunity to divide the levels into wholes and parts. The

concepts of "whole" and "parts" can be understood in the context of two leadership theorizations. The traditional ALS approach focuses on the work-group level. By considering the work group as homogeneous, they treat it as a whole entity. The variations in the components of work-group are presumed to be insignificant and non-existent. The VDL theory, on the other hand, though focuses on the work-group, states that there are significant variations within a work-group. Thus, whereas the former contends for a whole work-group, the latter empasizes on work-group parts level. We will take this as an example to understand these concepts further.

The Concept

In this section, we aim at understanding what are these levels conceptually. As has been mentioned, researchers have focused on different levels depending upon their purposes. In most cases, the levels have been assumed a priori, and the analyses have been done with this assumption as the backdrop. The delineation of levels becomes imperative when there is a controversy about some presumed levels.

To begin with, levels or entities are understood in terms of some variables and/or relationships between them. In the context of our problem, very simply, the variable of leader behavior needs to be understood in terms of its level of existence. In the next section, we will evaluate all the theoretical possibilities of levels.

The Key Possibilities

In the traditional ALS approach, the work-group was considered to be homogeneous, and the leader behavior was considered to be the same for all the members in the group. This meant that there was one leader behavior score for one work-group. Each score was taken as an indivisible whole. Thus, the focus is on whole entities only, and the differences between different leaders were of interest. Essentially, in order for a whole condition to be true, the between entity variations should be significant, with no consideration for variations within entities.

Alternatively, the focus of interest might be the same level (group). But, the group is conceived as being made of interdependent parts. This would mean that the variable (leader behavior) varies significantly within an entity. The focus, hence, is on variations within an entity, with no focus on variations between entities. It needs to be clarified at this point that these parts (individual members) do not constitute person level, because the variable is evaluated in the context of a group. The individual members do not evaluate leader's behavior in isolation.

Thus, wholes and parts are two mutually exclusive conditions. Also, all the within variations are erroneous for a whole condition and between variations are erroneous for a parts condition. Thus for any one condition to be significant, any one of the variations has to be significant.

The exclusivity of the two is based on the premise that one variation cannot be valid and erroneous at the same time. Thus, there has to be a focus either on between the entities or on within them. This stream of thought is much in line with the concept of error in other traditional analyses. As indicated by Dansereau et al. (1984, p. 40),

> the work of Bakan (1966) suggests that 'error' is a kind of umbrella term for variation among scores from different individuals (between-entity variation), and variation among measurements for the same individual (within-entity variation).

Thus, theoretically, there is a possibility of two more conditions. In one case, both the variations (within and between) are significant; in another, neither variation is significant. Dansereau et al. (1984) call the former as equivocal condition, and the latter as inexplicable condition. Clearly, these two conditions--equivocal and inexplicable--define the rejection of both the wholes and parts conditions.

In sum, there are two acceptable conditions to establish the wholes or parts condition, and two conditions for the rejection of both.

Next, we identify the relevant data analysis techniques for this conceptualization.

Analysis of the Data: Key Indicators

In this section, we will first see how data are reduced in terms of basic principles of geometry. These geometrical indicators are then used to explain within and between analysis

developed to identify the level of data.

The Geometric Indicators

The geometric principles of the general linear tensor are used to identify the key mathematical indicators for the conversion of data. General linear tensor deals with the length of a vector and the cross-product or scalar-product between the two vectors. In essence, the variables used are the vectors and the relation between them is the scalar product. This scalar product or correlation between the two variables is shown to be equal to cosine of the angle between the two vectors.

Relatedness as Cos Θ. At a very basic level one begins with delineating the relationship between two variables (vectors). The terms "variables" and "vectors" will be used interchangeably.

Two variables (e.g., A and B) are said to be totally correlated when a certain amount of change in one (A) brings about an equal amount of change in the other (B). In such a case, the two vectors overlap and the angle between them is $0°$. At the other extreme, when the two variables are totally uncorrelated, the angle between them is $90°$. The angle can take any value between $0°$ and $90°$, to represent a positive relationship between two variables. Similarly the angles between $90°$ and $180°$ represent negative correlations. Thus, the angles can vary between $0°$ and $180°$. As mentioned earlier, cos Θ represents the relation between vectors, (Θ being the angle between the two

variables), the values ranging from cos $0°$ to cos $180°$ i.e., from -1 to $+1$. These angles are symmetrical. Thus, the absolute value of cos $45°$ (.7071) is the same as that of cos $135°$ ($-.7071$). The angle above $90°$ are the negative correlations but the strength is equal to the value of cos $(\Theta - 90°)$.

Correlation is equal to the cosine of angle between two vectors (Fisher, 1915; Harman, 1970). The same principle of symmetry applies to correlation, as well. The correlations of $+.7071$ and $-.7071$ have the same strength of relatedness, though the directions of the relation are reversed. Thus the correlation between variables A and B (r_{ab}) is equal to cos Θ_{ab} (Fisher, 1915; Harman, 1970).

Unrelatedness as cos Θ. Just as relatedness or association between the two variables can be explained through the angle between them, the unrelatedness or lack of association between the two can also be understood in terms of the same angle. Let us take the case of two variables, A and B. They are related to each other at a particular angle Θ_{ab}:
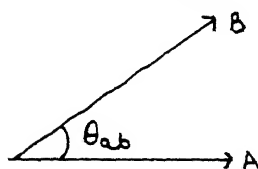
Since an angle of $90°$ is an ideal case of unrelatedness, we draw a perpendicular C ($90°$) to any one vector to understand unrelatedness:
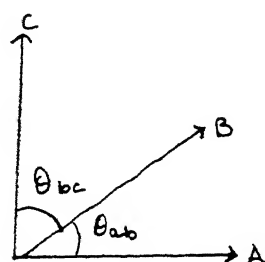
Now, both A and C are totally independent of each other. If B and C too are totally independent, then θ_{bc} is 90° and $\theta_{ab} = 0°$. In this case, it represents the correlation between A and B. As θ_{bc} increases from 0° to 90°, the association between A and B also increases. The θ_{bc} is a measure of unrelatedness between A and B, and $\theta_{bc} = 90° - \theta_{ab}$.

The <u>Relatedness</u>-<u>Unrelatedness</u> <u>Ratio</u> <u>as</u> <u>cot</u> θ. Thus we know $\cos \theta_{ab}$ = relatedness = $\underline{r}_{ab}$; and $\cos \theta_{bc}$ = unrelatedness = $\underline{r}_{bc}$. By derivation,

$$\frac{\cos \theta_{ab}}{\cos \theta_{bc}} = \cot \theta_{ab}$$

This ratio of relatedness and unrelatedness is called the <u>E</u>-ratio; hence,

$$E = \frac{\cos \theta_{ab}}{\cos \theta_{bc}} = \frac{r_{ab}}{r_{bc}} \quad \ldots\ldots\ldots \quad (3.1)$$

By derivation, we also know that

$$\cos \theta_{bc} = \sin \theta_{ab}; \text{ and}$$

$$\sin \theta_{ab} = \sqrt{1 - \cos^2 \theta_{ab}}.$$

Thus,

$$\cot \theta_{ab} = \frac{\cos \theta_{ab}}{\sqrt{1 - \cos^2 \theta_{ab}}} = \frac{r_{ab}}{\sqrt{1 - \underline{r}^2_{ab}}} = R \quad \ldots\ldots\ldots (3.2)$$

The ratio of $r_{ab}/\sqrt{1-r^2_{ab}}$ is called general $\underline{R}$-ratio and is denoted by $\underline{R}$.

Now, if is $90°$ and correlation is 0, cotangent takes a value of 0 and, on the other extreme, if θ is $0°$ and correlation is 1, cotangent tends towards infinity. The cotangent has a maximum value of 1 if θ is $45°$ which means that relatedness and unrelatedness are equal or correlation is equal to .7071 from equation 3.2. $\underline{E}$-ratio and $\underline{R}$-ratio too have the same range as cotangent and are the alternative expressions of the same (cotangent).

Now, we know how general correlations (calculated statistically) can be mapped in geometric terms. But, in the traditional analysis, only the total correlations between the variables are computed. Dansereau et al. (1984, pp. 119-120) point out:

> For one thing, the widespread use and analysis of total correlations and other indicators based on total deviations fails explicitly to take into account the entities or levels of analysis that may be specified on a theoretical basis .... Therefore, it is necessary to extend this traditional approach by using the general linear tensor explicitly to include entities and levels of analysis. We call this extension within and between analysis (WABA).

We now turn to WABA and explain it in terms of the geometric indicators.

Within and Between Analysis (WABA)

Dansereau et al. (1984) report that this extension (WABA) is based on the works of Robinson (1950) and Duncan, Cuzzort, and Duncan (1961).

Besides giving total correlations between two variables, WABA gives additional information about correlations. In the section titled "The Concept", it was mentioned that the level of existence of one variable can be understood in terms of whole entities (focus on between variation) and parts of the entity (focus on within variation), WABA. Thus, besides taking total deviations of scores on one variable, the variations within entities (called cells) and between them are also calculated (see Table 3.1 for an illustration). Thus, for one variable, we have three sets of scores--Total, Within, and Between. For any variable (e.g., A), the total deviations are a sum of within and between variations such that

$$(A - \bar{A}) = (A - \bar{A}j) + (\bar{A}j - \bar{A})$$

where, j represents the cell and $\bar{A}j$ represents the mean of the cell.

Now, let us define variable A as the leader behavior, three leaders constitute the sample (represented by cells I, II, and III in Table 3.1). Each leader has three subordinates in his or her work-group denoted as a, b, c; d, e, f; and g, h, i in Table 3.1. Each leader's behavior towards the three subordinates constitutes a cell. Thus, a focus within the cells will represent a work-group parts condition, whereas a focus between

the cells will represent a work-group wholes condition. The relative strengths of the two (within and between) are evaluated by computing a correlation of each with total deviations. These are called within and between cells eta correlations.

Further, these within and between cells eta correlations are independent of each other—a point that can be made clear through Table 3.2. Since the numerator of correlation equation for between with within correlation is always 0, the correlation between the two is also 0. Geometrically, this would mean that the angle between the two is $90°$. That is,
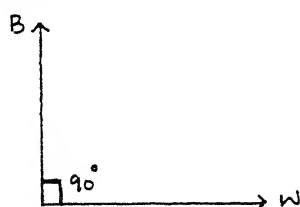
Since the total variations are composed of within and between variations, the vector T for total variation lies somewhere between these two vectors in the following manner:
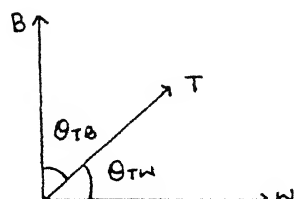
From the correlation formula (see Table 3.1), within and between eta correlations are computed. For variable A, within eta correlation is denoted as η_{WA} and between eta correlation as η_{BA}.

From equation 3.1 we know that

$$E = \frac{\cos \theta_{TB}}{\cos \theta_{TW}} = \frac{\eta_{BA}}{\eta_{WA}} = \cot \theta_{TB} \quad \ldots \ldots \ldots (3.3)$$

From the general correlation equations, it can be shown that $\eta^2_{WA} + \eta^2_{BA} = 1$.

Now, let us consider the various possibilities. On one extreme, all the total variation is explained by the within variations such that θ_{TW} is $0°$, η^2_{WA} equals 1, and η^2_{BA} equals 0 (θ_{TB} becomes $90°$). On the other extreme, all the total variation is explained by between variations such that $\theta_{TB} = 0°$, η^2_{BA} equals 1, and η^2_{WA} equals 0 (θ_{TW} becomes 90). As has been shown earlier, E ratio ranges from 0 to ∞ (just as $\cot \theta$). E ratio is 1 when both the angles (θ_{TB} and θ_{TW}) become equal, i.e., $45°$. E-ratio becomes greater than 1 if the total variation is closer to between variation (η_{BA} becomes greater), and E-ratio becomes less than 1 if the total variation is closer to within variation (η_{WA} becomes greater). Notice that the E-ratio is absolutely independent of the sample size (N).

Statistical Equivalent of E-Ratio

The sample size (N) or the degrees of freedom will influence the eta correlations. It can be shown that the degrees of freedom associated with η_{BA} is N-J, where, N = Total number; J = Number of cells; and the degrees of freedom associated with η_{WA} is J-1.

Now, it can be shown that

$$\underline{F} = E^2 \ \frac{(N-J)}{(J-1)}$$

We know that

$$\underline{E}^2 = \frac{\eta^2_{BA}}{\eta^2_{WA}}$$

from the correlation equation (see Table 3.1),

$$\eta^2_{BA} = \frac{\sum(\bar{A}j - \bar{A})^2}{\sum(A - \bar{A})^2} = \frac{SS_B}{SS_T} \quad \text{and,} \quad \eta^2_{WA} = \frac{\sum(A - \bar{A}j)^2}{\sum(A - \bar{A})^2} = \frac{SS_W}{SS_T}$$

Where, SS_W, SS_B and SS_T are sum of squares for within, between, and total deviations, respectively.

Thus,

$$E^2 = \frac{\eta^2_{BA}}{\eta^2_{WA}} = \frac{SS_B}{SS_W}$$

Multiplying $\underline{E}$-ratio by the ratio of degrees of freedom, we have

$$E^2 \ \frac{(N-J)}{(J-1)} = \frac{SS_B \ (N-J)}{SS_W \ (J-1)} = \text{F-ratio} \quad \ldots\ldots (3.4)$$

An Illustration

Table 3.1 shows a reduction of data into total, within, and between cell components. As mentioned earlier, the variable A under consideration is the leader behavior of three leaders when each one of them evaluates his or her behavior towards three

ustration of Within-and-Between Analysis (WABA) of Leader

r (Variable A)

	Cell I			Cell II			Cell III			SUMMATION	
	a	b	c	d	e	f	g	h	i	Numerical	Symbolic
e A											
(A)	1	9	5	6	2	1	8	1	3	36	$\Sigma(A)$
ə (Ā)	4	4	4	4	4	4	4	4	4	36	$\Sigma(\bar{A})$
verages (Āj)	5	5	5	3	3	3	4	4	4	36	$\Sigma(Aj)$
Deviations (A-Ā)	-3	5	1	2	-2	-3	4	-3	-1	00	$\Sigma(A-\bar{A})=0$
Cell Deviations	-4	4	0	3	-1	-2	4	-3	-1	00	$\Sigma(A-\bar{A}j)=0$
n Cell Deviations	-1	-1	-1	1	1	1	0	0	0	00	$\Sigma(\bar{A}j-\bar{A})=0$
d Total ions (A-Ā)²	9	25	1	4	4	9	16	9	1	78	$\Sigma(A-A)^2$
d Within ions (A-Āj)²	16	16	0	9	1	4	16	9	1	72	$\Sigma(A-\bar{A}j)^2$
d Between ions (Āj-Ā)²	1	1	1	1	1	1	0	0	0	6	$\Sigma(\bar{A}j-\bar{A})^2$

Products for Variable A

	a	b	c	d	e	f	g	h	i	Numerical	Symbolic
by Between (Āj-Ā)	3	-5	-1	2	-2	-3	0	0	0	-6	$\Sigma(A-\bar{A})(\bar{A}j-\bar{A})$
by Within (A-Āj)	12	20	0	6	2	6	16	9	1	72	$\Sigma(A-\bar{A})(A-\bar{A}j)$
en by Within)(A-Āj)	4	-4	0	3	-1	-2	0	0	0	0	$\Sigma(\bar{A}j-\bar{A})(A-\bar{A}j)$

lations for Variable A

Between eta correlations (η_{BA})
$$= [\Sigma(A-\bar{A})\ (\bar{A}j-\bar{A})]/\sqrt{\Sigma(A-\bar{A})^2\ \Sigma(\bar{A}j-\bar{A})^2}$$
$$= -6 / \sqrt{(78)(6)}$$
$$= .28$$

Within eta correlations (η_{WA})
$$= [\Sigma(A-\bar{A})\ (A-\bar{A}j)]/\sqrt{\Sigma(A-\bar{A})^2\ \Sigma(A-\bar{A}j)^2}$$
$$= 72 / \sqrt{(78)(72)}$$
$$= .96$$

Between with Within Correlations (η_{BWA})
$$= [\Sigma(\bar{A}j-\bar{A})\ (A-\bar{A}j)]/\sqrt{\Sigma(A-\bar{A})^2\ \Sigma(A-\bar{A}j)^2}$$
$$= 0 / \sqrt{(6)(72)}$$
$$= 0$$

3.2

rences from WABA for Variable A

	Variable A
eta between (2)	.28
eta within (6)	.96
E ratio	.29
F ratio	.25

Inferences

Wholes:

$15°$ E $\geq$ 1.30

$30°$ E $\geq$ 1.73

.05 F $\geq$ 5.14

.01 F $\geq$ 10.92

Parts:

$15°$ E $\geq$ .77   #

$30°$ E $\geq$ .58   #

.05 F $\leq$ .05

.01 F $\leq$ .01

Reject:

$15°$ E (all others)

$30°$ E (all others)

.05 F (all others)   #

.01 F (all others)   #

shows the location of data (level); Numbers
in parantheses are the degrees of freedom.

subordinates each. Table 3.1 also shows the calculation of η_{BA}, η_{WA}, and η_{BWA} (equals 0).

Table 3.2 shows the E and F ratios from formulae 3.3 and 3.4, respectively. Table 3.2 also shows inferences about the levels--wholes, parts, or reject. We now turn to the inferences drawn from these mathematical indicators and their levels of significance.

Mathematical Indicators: Their Meanings and Significance

So far, we understood the meanings of these mathematical indicators in terms of ideal conditions (of the indicators). Next, we focus on how the values taken on by these indicators approximate the ideal conditions (significance).

Meanings of Indicators (Ideal Conditions)

We mentioned in our section of conceptual scheme that, for an ideal whole condition, the focus is on variations between entities. Thus, if the empirical values of the indicators take on such values that within variation is 0 and between variation is 1, it is an ideal whole condition. In such a case, η_{BA} is 1 and η_{WA} is 0 which implies that, E and F ratios tend to ∞ .

In an ideal parts condition, the focus is on within variations. In this case, η_{BA} is 0 and η_{WA} is 1 such that all the variation (total) is explained by within variations. In such a case E and F ratios equal 0.

Besides these, there are two reject levels. In an ideal equivocal condition, both η_{WA} and η_{BA} are equal; that is, they

take a value of .7071 (cos 45°). Here, $\underline{E}$ and $\underline{F}$ ratios equal 1.

Finally, in an ideal inexplicable condition, both the variations are zero. That means, there is no deviation at all. In such a case, $\underline{E}$ and $\underline{F}$ ratios are indeterminate.

Now, we see how the actual values are to be analyzed in the framework of these ideal conditions.

Significance Tests

We take the entire range of values that these indicators take to ascertain the approximation of each value to the ideal conditions. The significance tests of $\underline{E}$-ratio are called practical significance tests (Dansereau et al., 1984), as they are independent of degrees of freedom. $\underline{F}$-ratios are, of course, tested through statistical procedures.

Tests of Practical Significance. To identify a wholes, parts, or reject condition, three intervals of $\underline{E}$-ratios for significance are identified. These three tests are 0°, 15°, and 30° tests. These angles show the angles for the reject condition.

Thus, in 0° tests, the exact midpoint is taken as the cut-off such that all values of $\underline{E}$ greater than 1 are taken to indicate wholes condition and all values less than 1 are taken to indicate parts condition:
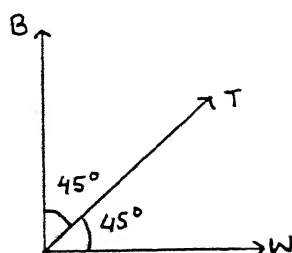
There is no range at all for reject values.

The next alternative is to divide the whole range of $0°$ to $90°$ (angle between within and between) into three parts--$0°$ to $30°$, $30°$ to $60°$, and $60°$ to $90°$--in the following manner:
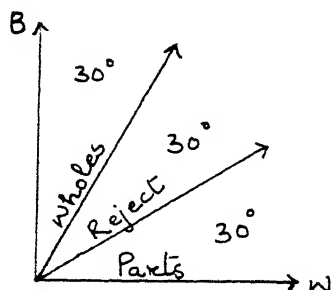
In this case, values between $0°$ and $30°$ are taken to represent parts condition and values between $60°$ and $90°$ are taken to represent wholes condition. Thus, there are two cut-off points: $\cos 30°$ and $\cos 60°$. $\underline{E}$-ratios are cotangents of these angles, and the values falling between them constitute the reject level. Hence, all values greater than or equal to 1.73 (cot $30°$) approximate wholes condition and all the values less than or equal to .577 (cot $60°$) approximate the parts condition. All the other values (falling in centre $30°$ range) constitute the reject level values.

Finally, the third alternative is to take only $15°$ in the centre which is symmetric around the midpoint of $45°$. Thus, the range is from $52.5°$ ($45° + 7.5°$) to $37.5°$ ($45° - 7.5°$).
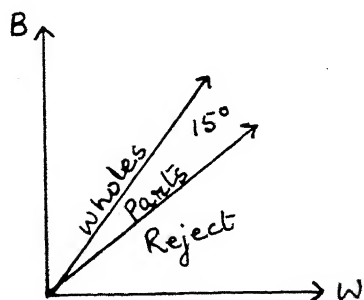
52.5° and 37.5° provide the cut-off points such that E-ratios greater than or equal to 1.303 (cot 38.5°) approximate the wholes condition and values less than or equal to .767 (cot 52.5°) approximate the parts level. All the other values between these two approximate the reject level.

Thus, we see that a 0° test takes all the values to be fullfilling either wholes or parts condition, with no possibility of rejection of levels at one extreme. At the other extreme, a 30° test provides equal intervals (30°s) for all the three conditions--wholes, parts, and reject. This gives a very high possibility for rejection of levels. A 15° test falls midway, with 15 range of values constituting the reject level.

Tests of Statistical Significance. The F-test can be used to test the significance of η_{BA} and/or η_{WA}. Between and Within eta correlations are tested through the following two equations, respectively:

$$F_B = \frac{\eta^2_{BA}}{\eta^2_{WA}} \cdot \frac{(N-J)}{(J-1)} = \frac{\eta^2_{BA}/(J-1)}{\eta^2_{WA}/(N-J)} \quad \cdots \cdot (3.5)$$

$$F_W = \frac{\eta^2_{WA}}{\eta^2_{BA}} \cdot \frac{(J-1)}{(N-J)} = \frac{\eta^2_{WA}/(N-J)}{\eta^2_{BA}/(J-1)} \quad \cdots \cdot (3.6)$$

From equations 3.5 and 3.6,

$$F_B = \frac{1}{F_W} \quad \text{and} \quad F_W = \frac{1}{F_B}$$

Thus, for a wholes condition (F_B) J-1 are the degrees of freedom of the numerator and N-J are the degrees of freedom of

the denominator from equation 3.5. The corresponding values of F at .05 and .01 levels can be looked up in the table for the satisfaction of wholes condition.

But for parts condition, N-J and J-1 are the degrees of freedom for the numerator and the denominator, respectively. Since E-ratios are calculated from E ratios and,

$$E^2 = \frac{\eta^2_{BA}}{\eta^2_{WA}}$$

and,

$$F = \frac{\eta^2_{BA}}{\eta^2_{WA}} \times \frac{N-J}{J-1}$$

But we know from equation 3.6 that F ratio for a parts condition is $(\eta^2_{WA} / \eta^2_{BA}) \times [(J-1)/(N-J)]$. Thus, for a parts condition, the inverse of F-ratio needs to be taken.

In summary, then,

$$\hat{F}_{Parts} = \frac{1}{\hat{F}_{N-J,\ J-1}} \qquad \dots\dots (3.7)$$

$$\hat{F}_{Wholes} = \hat{F}_{J-1,\ N-J} \qquad \dots\dots (3.8)$$

As an illustration, we take the example shown in Table 3.1. In all, 9 subordinates compose 3 groups, where the between-group scores have J-1 (2) degrees of freedom and within cell scores have N-J (6) degrees of freedom. Thus, for a wholes condition where between variation is of interest, the F values with 2 and 6

degrees of freedom at .05 (5.14) and .01 (10.92) levels provide the cut-offs for wholes condition.

On the other hand, for a parts condition, the degrees of freedom are 6 and 2. The corresponding F-ratios for these degrees of freedom at .05 and .01 levels are 19.33 and 99.33. But for the parts condition, the inverse of these figures are required (see equation 3.7), which comes to .05 and .01, respectively. The F values for wholes and parts conditions for both the .05 and .01 levels for this example are given in Table 3.2.

In this section, the relevant details of the varient approach were discussed. This analysis has been used in Chapter 4, where the level of quality of interaction is established. In the next section, we take up an extended application of Within and Between Alnalysis.

An Application of WABA

So far, we focused on establishing the level for one variable. In our problem of leadership, we do focus on variation of leader behavior in a group and the varying experiences of the subordinates in a work-group. This no doubt is established through the strategies detailed in the previous section. Further, the leader behavior (or leadership) influences job related attitudes and behaviors of the subordinates. Essentially, we are interested in the predictive strength of leadership behavior. Now, if there are variations in leader's

behavior within a work-group, this variation should be a better and stronger predictor of the outcome variables. Statistically, the relative predictive strengths of the two approaches--ALS and VDL--need to be evaluated.

For this purpose, an extension of WABA is suggested. As we notice in the last section, WABA employs a partitioning of total variations into within and between variations. A similar approach was suggested by Dansereau and Dumas (1977) and Markham, Dansereau, and Alutto (1979). These components--within, between and total--were first used to evaluate their relative strengths in predicting job related outcomes by Katerberg and Hom (1981).

In this approach, the different components of the predictor variables are put into a hierarchical regression equation for different criterion variables. If indeed leader behavior is homogeneous in a work-group, the group mean should reflect the true leader behavior, according to the ALS approach. But, according to the VDL approach, the leader's behavior towards individual members is more relevant. Thus, we have two representations of leader behavior--group means (for ALS) and individual responses (for VDL).

In a hierarchical regression equation, for every criterion variable, first of all the group means of the predictor are entered followed by the individual scores of the predictor.

In another variation of this technique, both the within and between components can be put in a stepwise regression equation as predictors for different criterion variables. The results will

show the better predictor naturally.

The same analysis (stepwise regression) is used in the present study to predict the outcome variables of influence strategies (both from the leader and the member perspectives), members' satisfaction, commitment, and their (members') perception of unit effectiveness. This analysis is used in Chapter 6.

OTHER TRADITIONAL ANALYSES

Besides establishing the level of "Quality of Interaction", the present work also aimed at investigating some antecedents as well as consequences of the quality of interaction. The antecedents of the quality of exchange are hypothesized to be the interaction of some variables. Also the different dimensions of the quality of exchange are hypothesized to affect the outcome variables jointly (in interaction). Besides this, the independent effects of the quality of interaction dimensions too are hypothesized. Thus, we have two sets of analyses—one for investigating the interaction effects and the other for main effects.

Interaction Effects

As already mentioned, the interaction effects were hypothesized for all the antecedent conditions (Chapter 5) and for the outcome variables (Chapter 6).

The algebraic or statistical interaction has been largely

analyzed with two techniques: ANOVA and multiple regression analysis. Different researchers have used different techniques (either ANOVA or multiple regression). "This difference in analytic preference fits (well) with underlying assumptions about causes of behavior" (Schneider, 1983, p. 8). It needs to be mentioned, here, that the key construct of the present work—quality of interaction—is theoretically conceived of as a continuous variable (the leader's and the members' quality of interaction is supposed to vary continuously in a work group). The division of work-group (IN/OUT or high/Low LMX, etc.) only means that there are some distinct sub-groups in a work-group. "... scores on the negotiating latitude scale should not be grouped into artificial categories in that the underlying dimension is a continuous one" (Vecchio & Gobdel, 1984, p. 7). Because the multiple regression analysis preserves the continuous nature of the variables, it should be a preferred technique. In most cases, hence, multiple regression analysis was used to study the interactions. However, there were some interactions that involved two independent observations—that is, data both from the leaders and the members (e.g., the personal attributes of the two, leadership styles of the leader and the preference of the style by the members). Thus, to avoid common method variance, ANOVA was used. This is an unavoidable limitation of the analysis. Now, we discuss the two analyses very briefly.

Hierarchical Regression

As mentioned earlier, some of the interaction hypotheses were tested through hierarchical multiple regression analysis (Nie et al., 1975). For each interaction term, the variables were first converted to z-scores to give the scores equivalence, as they all roughly fall into the normal curve (i.e., $M = 0$; $SD = 1$). Finally the interaction term was taken as the product of these z-scores.

Instead of determining the incremental contribution of each variable by assuming it was added last, the hierarchical method requires the researcher to specify the order of inclusion. In the present study, the independent (or main) effects of the two variables were included at the first and second steps. Finally, at the third step, the interaction terms were included. The increment in R^2 at each step was taken as the component of variation. Thus, by taking the interaction terms at the third place, the confounding effects of the main effects were controlled. For an interaction hypothesis to be significant, the beta weights of the product term had to be significant. The significance of beta weights was tested through F-ratios. The formulae for computing F's are slightly different from those employed in the standard multiple regression analysis (for details, see Nie et al., 1975).

Significant interactions were further analyzed graphically. Scores with $\pm$ one standard deviation from the means were plotted (Hunt, Osborn, & Larson, 1975). While plotting the curves, the

mean scores were each divided by the number of items in order to maintain consistency across the figures. The data in the means table are also divided by the number of items. Further, in some cases, one of the cells was empty. For these cells the means were predicted by the formula given by Winer (1971, pp. 487-490). If more than one cells were empty (had zero values), the interaction was left out.

It needs to be mentioned here that the graphical representations show the direction of the interaction effects which is not shown by the beta weights. For the purpose of graphical representation, the data are grouped into qualitative categories (Low and High in the present study). Thus, it is possible that despite the beta weights being significant, the graphs of the same interaction might not look significant. This should be no cause of undue worry as the interaction is not a "discontinuous qualitative variable that differentiates subgroups of individuals who are qualitatively different but is a continuous quantitative variable" (Zedeck, 1971, p. 305).

AVOVA

As mentioned earlier, some of the interaction hypotheses were tested through the application of analysis of variance (ANOVA). The F-ratios and their significance for the interaction term only were of interest.

All the interactions involved two variables. Each of these variables was divided into two categories—low and high—by

splitting them at the median. Thus, a 2 x 2 ANOVA was used. Besides the $\underline{F}$-ratios and their significance, means and $\underline{n}$ of each cell are also reported.

Further, just as in hierarchical regression, the interactions here are also shown graphically. The mean score in each cell is further divided by the number of items in the relevant scale. The details of ANOVA can be looked up in any standard book of statistics (e.g., Kirk, 1968; Winer, 1971).

Main Effects

Stepwise Regression

This method of stepwise regression--a variant of multiple regression--is a powerful technique of choosing few best predictors from a set of independent variables.

In this method regression equations are created recursively. The best predictor (of a set of independent variables) comes at the first step, followed by the next best, and so on. This process continues till all the variables (that predict) are taken care of. This means that the first (at the first step) variable in the list is the best predictor. The next variable is a good predictor in conjunction with the first one, the third in conjunction with the first and second ones, and so on.

The significance of a particular predictor is a function of its beta weights. An $\underline{F}$-ratio is calculated for these beta weights as a direct measure of their significance (for details, see Nie et al., 1975).

Chapter 4

Measurement of Quality of Interaction

An Overview

The present chapter reports the development of a scale to measure leader-member exchanges (LMX). It has been divided into four major parts.

The concept of "LMX" is introduced in the first part of the chapter. The meaning is derived from the theoretical model presented in Chapter 1. The previous studies provide a useful background for deciphering the meaning. LMX emerges as a multidimensional concept which has the potential to test the reciprocity in the dyad.

The different operationalizations of LMX are discussed in the next part. The first section in this part contains the basis on which the earliest measure (i.e., negotiating latitude) was developed. The next section discusses the major measures. All the measures are unidimensional and few evaluate LMX from the leader perspective.

The third part deals with the development of a scale in line with the requirements. In the first section, the theoretical dimensions are mentioned. On the basis of these dimensions, the scale was developed. In the next section, the measurement aspects of the scale are taken up. First, the factor analysis results from both the leader and the member perspectives are reported. Secondly, some psychometric statistics, like

reliability and validity, are provided. The level of analysis is, then, established. A test of average _vs_ LMX status is conducted through WABA analysis. Finally, _mutuality_ or _reciprocity_ in a leader-member dyad is tested.

The major findings and their implications are summarized in the last part of this chapter.

THE CONCEPT

The VDL or LMX theorization begins with the contention that the work-unit under a leader is not a single-entity. The leader has differing relationships with different members in the work-group. Also, the members have differential relationships with their leader and, consequently, they have different job related attitudes and behaviors. Essentially, the focus is on differential work unit refuting the idea of homogeneity of the work-group.

Once the fact of a unit being differentiated is recognized, the next step is the identification of the aspects along which the leader-member interactions differ. Hence, the question is: what are the aspects of exchange (LMX) process that lead to collaboration only by some members on unstructured tasks, not by all? To study the basis of unit differentiation, these aspects need to be delineated. Therefore, any operationalization of LMX should take into consideration these aspects of interaction or exchange.

Before we go on to see the various conceptualizations of

LMX, a reconsideration of the theoretical bases is in order. It will give us the much needed insight into the aspects of interaction. This will also provide the backdrop against which different operationalizations of LMX can be evaluated.

In the section on theoretical bases (see Chapter 1), it has been noted that the unit under a leader gets differentiated because some members collaborate with the leader on unstructured tasks and others do not. In the developmental framework, it is the end-result of role development by the members. In the process of developing their roles, the members through negotiations and exchanges imbibe collaboration on unstructured tasks in their roles. Where the collaboration is maximum, the jobs are done by the joint activities of the leader and the member. Hence, there is a total interdependence of the leader and the member to attain organizational objectives. In the work unit under a leader, there are different dyads with different levels of interdependence. Thus, the interdependence of the leader and the member is high for higher quality of exchanges and low for lower quality of exchanges. Dansereau et al. (1975) describe the possibility of a leader behaving in two different ways with the subordinates. These two behaviors were taken to develop the first measure of quality of exchange. It will be taken up in the next section.

If one were to see the basis of unit differentiation, one needs to identify the aspects of exchanges that lead to differing

interdependence in different dyads. Graen and Scandura (1987) identify two dimensions of the exchanges that lead to interdependence between the leader and the member in a dyad. One aspect refers to the coupling of the leader and the member behaviors. This takes care of the reciprocal influence processes between the leader and the member. These are the actual negotiations between the two. This would involve the contributions of the members like increased effort, innovativeness, and so on, and members' inducements like increased influence in decision-making, more latitude, etc. The behaviors get interlocked because the leader's contributions are the members' inducements and the leader's inducements are the members' contributions. Thus, any operationalization of this coupling dimension would include these actual leader and member behaviors on the job.

The second dimension is relational or qualitative. We have already mentioned that once the role is routinized, the actual exchanges get characterized by some qualitative dimensions.

> The dyadic relationship that develops around the interlocked behaviors involves the relational dimensions of trust, respect, loyalty, liking, intimacy, support, openness and honesty (qualitative) (Graen & Scandura, 1987, p. 184).

In a sense, these qualitative aspects are an outcome of the earlier exchange processes. To begin with, the different aspects of these two dimensions have to be identified to give a global measure of LMX. The need, hence, is to develop a

multidimensional scale which would be a comprehensive measure of LMX.

Secondly, we have noted that the interaction or interdependence between the leader and the member is rooted in exchange processes. Therefore, any operationalization of the construct must incorporate the viewpoints of both the parties involved--the leader and the member. In other words, the measure should test the reciprocity or mutuality between the two parties (Dienesch & Liden, 1986). In addition, the measure should include such dimensions that at least have the potential to be evaluated both from the leader and the member perspectives. "Mutuality implies that an exchange must develop along dimensions to which both parties can contribute" (Dienesch & Liden, 1986, p. 624). These are the requirements, hence, that are to be met with while operationalizing the construct of LMX.

LMX OPERATIONALIZATIONS: A REVIEW

The Background

In the formulation of the VDL theory, Dansereau et al. (1975) identified the possibility of a leader indulging in two different kinds of behaviors with the subordinates. For this, they took a clue from Jacob's (1970) distinction between "leadership" and "supervision" as two techniques.

Employing the supervision technique, the nature of the vertical exchange is such that a superior relies almost

exclusively upon the formal employment contract in his exchanges with the member .... In contrast, employing the technique of <u>leadership</u>, the nature of the vertical exchange is such that the superior cannot rely exclusively upon the employment contract. Instead, he must seek a different basis for influencing the behavior of a member. This alternative basis of influence is anchored in the interpersonal exchange relationship between a superior and a member (Dansereau et al., 1975, p. 49, emphases added).

The indulgence of one leader in these different behaviors results in a differentiated unit. In the role development framework, we noticed that the negotiations on role took place only with those members who collaborated on unstructured tasks. Alternatively, the amount of negotiation on the roles defines the quality of exchanges between the leader and the member. Dansereau et al. (1975) state:

> <u>the greater the latitude initially given to the member to negotiate job-related matters, the higher is the probability that the superior is attempting leadership and the lower the probability that he is using supervision with his members</u> (p. 50, emphases in original).

The Operationalizations

In the discovery study, Dansereau et al. (1975) conceptualized LMX in terms of the negotiating latitude, which was defined as "the extent to which a superior is willing to consider requests from a member concerning role development" (p. 51). This was a longitudinal study, and the latitude given to the members at the initial stage was the predictor of different outcomes at later stages. Negotiating latitude was operationalized in terms of two items. In that study, the leader

support, attention, etc. were treated as outcomes. Dienesch and Liden (1986) criticize the above study because the variables that are treated as outcomes are, according to them, alternate measures of LMX. But since the study is longitudinal, it treats negotiating latitude as the antecedent of the exchanges that take place at a later stage. We will come back to this a little later. Right now, let us evaluate the other measures used in previous studies to assess LMX.

Following the initial 2-item operationalization (Dansereau et al., 1975), there have been many formulations and reformulations of the LMX measure. Table 4.1 lists various studies and the measures of LMX used in them.

Even a cursory look at Table 4.1 shows that the construct of LMX has seen various formulation in its short life span. Before we discuss the relatively stable measures (that have been used in at least two studies), let us first concentrate on the measures used in one study only.

In the Rosse and Kraut (1983) study, the traditional measure was not used, as the data were a part of the larger study. The items were not designed to test the VDL model. All the same, they picked up 4 items that could be considered to tap members' reported negotiating latitude (MNL). The two items taken were concerned with the management but were rated by the 14 expert judges as reflecting the negotiating latitude given by the manager to the subordinate. Similarly, the 14 judges identified 4 items that could tap the leader's reported negotiating latitude

(LNL). Rosse and Kraut (1983) provided construct validity by correlating these measures of negotiating latitude with other outcomes like job latitude, open and honest communications, etc. These are the variables that were also taken as outcomes in the Dansereau et al. (1975) study. These measures (LNL and MNL) are given a detailed treatment in the study to justify their inclusion in the measures of LMX.

Kim and Organ (1982), in their study, used a scale which they called the "Noncontractual Social Exchange" scale. They developed the scale with the view that the exchanges between the leader and the member need to be evaluated on a continuous scale. They took the concept of "exchanges" between a leader and a member. They also argued that a typical exchange process was initiated by the leader. Consequently, their scale measured the noncontractual social exchange from the leader's perspective. Their scale contained 15 items (from a pool of 20 items) and included items of the following kind: "I would give him personal favors," "I would initiate discussion with him on his personal problems to help him." The leader evaluated each member in terms of these items. The leader's evaluation of the subordinates in terms of these items has it's own problems. The problems are discussed later.

Kozlowski and Doherty (1989) used an information exchange (IE) scale in addition to a 7-item version of the LMX scale. For the IE scale, they started with 13 items but the final scale, based on factor analysis, retained only 8 items. The items

included those few aspects that differentiated between the IN and OUT group statuses. It involved giving information both upwards and downwards. The scale was used only from the subordinate perspective; hence, the member evaluated how much information or "scoop" the leader gave him or her, and also how much information (scoop) he or she gave to the leader. The emphasis was on information exchange both in terms of advices on the job and personal matters. It also included items directly asking the member's status in the IN- or the OUT-Group. The scale showed a high correlation with the 7-item LMX version (r = .73, N = 165, p < .001), thereby providing an evidence of concurrent validity that both the scales were measuring the same construct. But, Kozlowski and Doherty (1989) concluded: "The parallelism between the LMX measure and the IE measure was noteworthy, with the LMX measure being consistenly superior" (p. 550). This might be because the IE scale measured only one aspect of leader-member exchanges (i.e., the information exchange). As a result, it gave a narrow and peripheral conceptualization of the construct.

Next, we take up all those measures that have been used in more than one study. An inspection of Table 4.1 shows that there have been various operationalizations of the construct. But, once we look at each of the scales, we find that there is a lot of overlap between the items. The original 2 items of the negotiating latitude scale (Dansereau et al., 1975) have been retained in all the subsequent formulations. So, essentially, the later formulations are only extensions of the original scale.

Table 4.2

Pool of Items used in Different LMX Measures

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(1) How flexible do you believe your supervisor is about evolving change in your job?

(2) Regardless of how much formal organizational authority your supervisor has built into his position, what are the chances that he would be personally inclined to use his power to help you solve problems in your work?

(3) To what extent can you count on your supervisor to "bail you out" at his expense when you really need him?

(4) How often do you take your suggestions regarding your work to your supervisor?

(5) How would you characterize your working relationship with your supervisor?

(6) Do you usually feel that you know where you stand ... do you usually know how satisfied your immediate superior is with what you do?

(7) How well do you feel that your immediate supervisor understands your problems and needs?

(8) How well do you feel that your immediate supervisor recognizes your potential?

(9) I have enough confidence in my supervisor that I would defend and justify his or her decisions if he or she were not present to do so.

Table 4.3

Constitution of LMX Measures

The Measures	No. of Items	Items used*
Negotiating Latitude	2	1,2
Negotiating Latitude	4	1,2,3,4
LMX	5	1,2,3,4,5
LMX	7	1,2,5,6,7,8,9

Note.   * The numbers are the corresponding items in
         Table 4.2; LMX = Leader-Member Exchange.

Table 4.2 presents a pool of all the items used in the four LMX scales: 2-item negotiating latitude, 4-item negotiating latitude, 5-item LMX, and 7-item LMX. The 12-item vertical exchange scale will be taken up separately. Table 4.3 shows the actual composition of these different versions.

Thus far, we have traced a brief history of the items of negotiating latitude. The 2 items, originally coined in the Dansereau et al. study, have been included in all the versions of the LMX measure. We mentioned earlier that the Dansereau et al. (1975) study was a longitudinal study and measuring latitude at an earlier stage of role development was the right choice. In other cases, one begins with the assumption that the exchanges are relatively stable and enters the units at a time when the relationships in dyads have stabilized. For a cross-sectional study, it is advisable to include relational dimensions, as they are more salient at this stage, and instead of talking only about the latitude given, one can also talk of the contribution of the two parties on jobs.

The other versions of the LMX measure include elements of subordinate competence, trust, satisfaction of the leader with the member, leader support, etc. This clearly shows that there has always been a felt need to extend the measure but the attempt has always left something desired. The need, hence, is to develop a multidimensional measure that incorporates the different aspects of interaction.

And, now a word about the 12-item vertical exchange or LMX

scale used in a longitudinal study by Wakabayashi and his

associates. A longitudinal observation was started in Japan in

the early 1970s to evaluate the career progress of the new

entrants. The researchers administered the vertical exchange

scale to these new members to evaluate their standing with

respect to the leader. Whenever these members joined new

leaders, the vertical exchange was measured. The exchange was

measured by a 12-item (English language) scale, which is reported

in the 7-year (Wakabayashi & Graen, 1984) and the 13-year

(Wakabayashi, et.al., 1989) follow-up studies. The 12 items had

elements of

> approachability and flexibility of the supervisor
> toward the newcomer, the supervisor's willingness to
> use his authority to help the newcomer solve the
> problems, clarity of the supervisor's expectations and
> his feedback to the newcomer, the newcomer's latitude
> to influence his supervisor to change his role
> situation, opportunity for new comer to share after-
> hour social and leisure activities (Wakabayashi &
> Graen, 1984, p. 605).

This study also evaluates the leader-member exchanges at the

initial stages and hence the inclusion of flexibility, superior

expectations, support, etc. is justified.

Also, it needs to be pointed out that, with the exception of

a few studies (e.g., Wakabayashi & Graen, 1984; Wakabayashi et.

al., 1989), none of the studies have incorporated the leader's

evaluation of LMX. Kim and Organ (1982), on the other extreme,

have taken only the leader's evaluation of non contractual

exchange. Duchon, et. al. (1986) have used the sociometric

ratings of the leaders for the individual members as

corroborative evidence. Graen and Scandura (1987, p. 191) point out that

> the main difficulty with ... measures of the dyad taken from the superior's point of view is the tendency for superiors to respond somewhat defensively and give "socially desirable" answers. For example, there appears to be a tendency for supervisors to say that they treat all their subordinates alike.

But, as was pointed out earlier, the dyadic interactions need to be evaluated by both the parties involved. The problem of "social desirability" can be overcome if one party evaluates the contribution(s) of the other party. Thus, asking a leader how much a particular member works or contributes on jobs is liable to get much more objective responses. The member can also be asked the same question for the leader.

It may be concluded that the measures developed so far fail to tap the different aspects of the interaction. Secondly, they also generally fail to incorporate the evaluations of both the parties involved.

DEVELOPMENT OF THE SCALE

The Background

The present study aims to develop a scale which is comprehensive and involves different aspects of interaction. In other words, a multidimensional scale is sought to be developed. Secondly, the choice of the dimensions needs to be dealt with with utmost care. Only those dimensions need be taken that can be evaluated both by the leader and the member.

The starting point for the selection of the dimensions is the _three_ dimensions given by Dienesch and Liden (1986). Dinesch and Liden propose an employment of the following three dimensions to meet the above mentioned two criteria:

> (a) _Perceived_ _contribution_ to the exchange--perception of the amount, direction, and quality of work-oriented activity each member puts forth toward the mutual goals (explicit or implicit) of the dyad; (b) _Loyalty_--the expression of public support for the goals and the personal character of the other member of the LMX dyad (emphasis is on public support/symbolic actions for the benefit of third parties--not suppression of dissent or debate within the leader-member relationship; the good team player approach); (c) _Affect_--the mutual affection the members of the dyad have for each other based primarily on interpersonal attraction rather than work or professional values (p. 625, emphases added).

These dimensions take care of the quality of interaction on-the-work (perceived contribution and loyalty) and off-the-work (affect). Graen and Scandure (1987) do talk of relational aspects but these aspects are not independent of work. They include relational dimensions on the work itself. Hence, the actual behavioral (coupling) dimension and qualitative dimension may not really be two independent dimensions. Thus, we incorporate both the aspects _but_ the relational dimension becomes essentially affective in nature. It may be argued that although the two dimensions are presumed to be separate, the elements of the two are intercorrelated. As Homans (1951, p. 112) points out:

> if the interactions between the members of a group are frequent in the external (task) system, sentiments of liking will grow up between them.

Once the scale has been developed, at the second step, the study aims to evaluate the levels at which the measure is to be

understood. First, it aims to identify whether the leader shows differences in evaluating different subordinates (leader perspective). Secondly, it aims to see whether the different members in a unit evaluate their leader differently (member perspective).

Finally, it is proposed to examine whether the leader and the member in a dyad show reciprocity. In other words, the study aims to see whether there is a similarity of perception within a dyad.

Measurement

Preliminaries

A number of items were identified in the above mentioned three dimensions. After a pilot study, the items were refined and reworded by weeding out the weak items, modifying the ambiguous ones, and so on. The questionnaire, in Study 1, contained 24 items (1 item reverse scored). Of these 24, 9 items were composed of perceived contribution, 7 of loyalty, and 8 of affect dimensions (Appendix I). The scale was named "Quality of Interaction" (QI) scale. The use of the term "exchange" was deliberately avoided, as it was not the exchanges (in terms of behavioral inducements and contributions) that were being evaluated. Of course, the three dimensions taken, if evaluated from both the perspectives, are explained and understood in an exchange framework. But, all the studies might not aim to evaluate these dimensions from both the perspectives; they could

be interested in evaluating any one perspective (e.g., for predicting outcomes for the members). In Study 1, a total of 304 responses were obtained on this section of the questionnaire--152 responses were the leader's evaluations of the members and 152 were those of the members' for the leaders. Thus, there were 152 dyads. The respondents were asked to evaluate on a 7-point scale (1 = not at all; 7 = very much) the degree to which each item was true for the interaction between him or her and the other person (the leader's or the member's name, with whom the interaction was evaluated, was mentioned).

In Study 2, only those items and dimensions of the QI Scale were taken that emerged after the factor analysis of the scale in Study 1. The results of factor analysis will be discussed in the following section. In Study 2, only the members (N = 96) evaluated the interaction with their leaders. The instructions were the same as in Study 1. These 96 members belonged to 26 work-groups, with mostly 4 but sometimes 3 members in a group .

Psychometric Measurements of the Scale

Factor Analysis Results and Discussion

All the 24 items in Study 1 were subjected to a varimax rotated factor analysis, as a partial test of the construct validity. First, the data were pooled from both the perspectives--leader and member (N = 304)--to investigate their common factor structure.

The analysis yielded two neat factors containing 10 items.

Only those factors were included that had eigenvalue around 1. Items in a factor were retained only when the factor loadings were above .50 and cross-loadings generally below .30. When the loadings of an item on the factor were very high, the criterion of cross-loadings was relaxed a little, and the item was allowed to stay on the factor. The factor loadings obtained are given in Table 4.4. The same analysis was repeated for the members' evaluations ($\underline{N}$ = 152). The results constrained to the same two dimensions. These factor loadings are also provided in Table 4.4. In both the cases (i.e., the combined data and the member

Table 4.4

Factor Loadings Obtained--Quality of Interaction Measures (Study 1)

	Factor Loadings					
Items	Combined		Member		Leader	
	F1	F2	F1	F2	F1	F2
4. How much responsibility does he/she take for the jobs that are to be done together by you and him/her?	81	29	83	24	74	29
15. How much is his/her contribution to the quantity of solutions on the jobs that are to be done together by you and him/her?	82	20	82	22	73	14
17. How efficient is his/her contribution on the jobs for which the two of you work together?	82	30	82	27	70	30

21. How useful is his/her effort on the jobs that are to be done together by you and him/her?	_84_	29	_83_	30	_78_	24
24. How much initiative does he/she take in solving the problems that are to be done together by you and him/her?	_80_	32	_76_	34	_71_	26
7. How much do you interact with each other off-the-job?	32	_61_	34	_56_	16	_68_
13. How much do you help each other in personal matters?	14	_88_	10	_87_	20	_88_
16. How much advice do you seek from each other on personal problems?	21	_88_	18	_90_	23	_85_
19. How much do you discuss your personal matters with each other?	18	_90_	15	_90_	15	_90_
23. How much importance do you attach to each other's advice on personal matters?	31	_76_	32	_74_	24	_76_
Eigenvalue	14.00	2.38	13.73	2.44	14.38	.84
Percentage of Variance	85.50	14.50	84.90	15.10	81.50	4.80

Note.   F1 = Perceived contribution; F2 = Affect; Decimal points in factor loadings have been omitted.

perspective), the two factors explained all the variances. In both of them, the first factor (i.e., perceived contribution) explained around 85% of the variance. The data for leader perspective (N = 152) were also subjected to a factor analysis. Although the results for leader perspective yielded three

factors, _none_ of the items in the second factor met the requirement of cross-loadings below or around .30. _All_ the items that loaded heavily on the second factor had high cross-loadings on factor 1 (usually the magnitude being .40 and above). Therefore, only factor 1 and factor 3 were included. In this case, the two factors together explained a total of 86.3% of the variance. For these factor loadings also, see Table 4.4. Table 4.5 shows the inter-item and item-test correlations.

The first factor, in all the three factor analyses, contained 5 items. All these items corresponded to the contribution on job and, hence, the factor was called, _Perceived Contribution_ (PC). The contribution was evaluated in terms of responsibility taken, efficiency, usefulness (relevance), amount of effort, and initiativeness. For both the leader and the member perspectives (and also the combined data), this was the first and the most powerful factor. This reveals the centrality of "contribution" on the job _both_ from the leader and the member perspectives.

The second fator included 5 items of mutual liking, and was called, _Affect_ (AF). The items included discussing and seeking advice on personal problems, amount of interation off-the-job, taking help in personal matters, and so on. A closer scrutiny of Table 4.5 shows that the item on interaction off-the-job (item 7) shows a relatively weaker (though acceptable) item-test correlation. This is probably because interaction off-the-job is a function of some other variables, besides affect, like home

location, religious affiliations, etc. (Crouch & Yetton, 1988). For both the leaders and the members, affect was the second factor that explained much less variance than the first factor.

Table 4.5

Descriptive Statistics, Inter-item Correlations, and Item-total Correlations of the Quality of Interaction Scale (Study 1)

Items*	4	15	17	21	24	7	13	16	19	23
4	–									
15	.72	–								
17	.75	.82	–							
21	.77	.78	.81	–						
24	.75	.75	.78	.80	–					
7	.40	.38	.46	.43	.43	–				
13	.37	.29	.38	.38	.40	.58	–			
16	.40	.37	.45	.42	.46	.58	.82	–		
19	.40	.32	.42	.40	.45	.61	.83	.88	–	
23	.47	.35	.45	.48	.50	.59	.70	.69	.72	–
M	5.13	4.92	4.94	5.01	4.90	3.44	3.40	3.07	3.03	3.81
SD	1.46	1.36	1.34	1.36	1.45	1.75	1.61	1.47	4.07	1.64
Item-Test r	.81	.84	.87	.87	.85	.65	.84	.85	.87	.76

Note.   * For the description of the items, refer to Table 4.4;
N = 304

The emergence of two factors in the same order for both the leaders and the members confirms that the dimensions chosen have the potential to be evaluated by both--the leader and the member --without any biases. This also provides an evidence for the stability of factor structures for the sub-scales, as for the two sets of respondents (the leader and the member) the identical factors emerged. The two subscales were only moderately intercorrelated (r = .50 for the combined data), thereby showing a great deal of independence.

Table 4.6

Descriptive Statistics and Coefficients Alpha of the QI scales

	Sample	Subscale	Mean	SD	Alpha
	COM (N=304)	PC	24.92	6.31	.94
		AF	16.75	6.90	.92
STUDY 1	L (N=152)	PC	24.57	6.28	.95
		AF	16.10	6.49	.93
	M (N=152)	PC	25.26	6.35	.93
		AF	17.41	7.25	.91
STUDY 2	M (N=96)	PC	22.08	7.34	.93
		AF	17.16	7.62	.92

Note.   COM = Combined data; L = Leader perspective; M = Member perspective; PC = Perceived Contribution; AF = Affect; Each subscale consisted of 5 items.

Of the three hypothesized factors (perceived contribution, loyalty, and affect), only two emerged. <u>Loyalty</u> did not emerge at all probably because both the parties involved (i.e., the leader and the member) evaluate the relationship at the dyadic level and the interaction with the other members of the group is not considered important. But the two dimensions that emerge cover the two broad areas--the behavioral contribution on the job and the affective reactions of the two.

The means, SDs, and number of items of the QI subscales can be looked up in Table 4.6.

<u>Psychometric</u> <u>Properties</u>

The reliabilities (Cronbach's coefficents alpha) of the scales in both the studies are reported in Table 4.6. It is clearly evident that the scales have very impressive reliability coefficients, ranging between .91 and .95.

To test the external validity of the scales, a 5-item LMX measure was included in Study 1. The two factors--perceived contribution and affect--correlated highly with the LMX measure. The correlations are given in Table 4.7. Perceived contribution showed a higher correlation than affect. This is probably because the LMX scale measures the behaviors on the job very much like the perceived contribution. In Study 2, the Attention and Latitude measures were used to recheck the validity. The correlations of newly developed measures (perceived contribution and affect) with attention and latitude (Table 4.7) were quite

high. This too should be considered a partial evidence of external validity.

Table 4.7

Relationships of Perceived Contribution (PC) and Affect (AF) with Other Measures of Quality of Exchange (Member Perspective)

	PC	AF
Study 1[a]		
LMX	.77	.52
Study 2[b]		
AT	.81	.72
LT	.68	.69

Note. a N = 152; b N = 96; AT = Attention; LT = Latitude; LMX = Leader-Member Exchange.

So far, we have seen the development of a scale which has two dimensions, with strong reliabilities and evidence of external validity. This is a scale that takes care of both the leader and the member perspectives. Next, we go on to see whether the scale shows unit differentiation or not. Further, we test the mutuality in a leader-member dyad.

Establishment of The Level

Within- and Between-Person and Work-Group

As has been pointed out, the VDL or the LMX approach focuses

on the individual members, not the work-group. Although there are certain aspects of leadership which could be applicable to the work-group as a whole, the measures developed on the basis of exchange model should show within-group variance. Since the quality of interaction measures have been developed in this framework, they are expected to reveal these variations.

The analysis is conducted from two perspectives--the leader and the member. From the leader perspective, the objective is to see whether the leader differentiates between different members in terms of their contribution on-the-job and his or her affect for them. If he or she does, the within person (i.e., the leader) variance should be more and if the individual leaders differ, the between-variance should be more. If neither exists, a reject condition is established. For this purpose, a very small sample was available. Only the leaders in Synthetics Limited (Study 1) evaluated around four members each. In all the other organizations, each leader evaluated only two members. Two is too small a number to study within-group variance. Hence, only the leaders in the above mentioned organization were put through this analysis. Eleven leaders evaluated 40 members (N = 40). The results of WABA analysis for this sample are presented in Table 4.8. The analysis shows that within eta correlations are higher than between eta correlations for both--perceived contribution and affect. Although perceived contribution and affect show significant E-ratios, F-ratios are not significant for either. This is probably because F-ratios are

Table 4.8

WABA: Within-and-Between Person (Leader) Analysis (Study 1)

	PC	AF
eta between (10)	.44	.58
eta within (29)	.90	.81
E-Ratio	.49	.72
F-Ratio	.70	1.50

Inferences

WHOLES

15° E $\geq$ 1.30

30° E $\geq$ 1.73

.05 F $\geq$ 2.18

.01 F $\geq$ 3.00

PARTS

15° E $\leq$ .77	#	#
30° E $\leq$ .58	#	
.05 F $\leq$ .37		
.01 F $\leq$ .23		

REJECT

15° (all others)		
30° (all others)		#
.05 (all others)	#	#
.01 (all others)	#	#

Note.   N = 40;   # Shows the location of data (level); Numbers
         in parantheses are the degrees of freedom.

sensitive to sample size which is too small here ($N = 40$). The findings imply that the leader evaluates the different members in the work-group differently in terms of their contribution on the job and his or her affect for them, thereby establishing a person-part level. A closer examination of the F-ratios for perceived contribution and affect shows that whereas the person-part level is established strongly for perceived contribution, it is weakly established for the affect dimension. This is probably because the leaders are more objective and factual in evaluating different members' contribution on the job. But, while reporting their feelings or affect for the members, they become somewhat defensive.

From the members' perspective also, a similar analysis was done. The reference now is made to the work-group. The aim is to evaluate whether members in a work-group evaluate their leader differently in terms of leader's contribution on the job and their affect for the leader. For this purpose again, sufficiently larger work-group is needed (around 4). Hence, we analyze the data from Study 2 where 96 members belonging to 26 work-groups responded to the questionnaire.

A WABA analysis for the work-group level would be a direct test of the Average (ALS) vs the VDL models. The establishment of whole work-group level would be the evidence of an average nature of leadership, whereas a work-group parts level would be the evidence of a non-average nature of leadership (see Chapter 3).

Table 4.9

WABA: Within-and-Between Work-Group (Member) Analysis (Study 2)

	PC	AF
<u>eta</u> between (26)	.43	.53
<u>eta</u> within (69)	.90	.85
E-Ratio	.48	.62
F-Ratio	.61	1.02

Inferences

<u>WHOLES</u>

$15°$ E $\geq$ 1.30

$30°$ E $\geq$ 1.73

.05 F $\geq$ 2.18

.01 F $\geq$ 3.00

<u>PARTS</u>

		PC	AF
$15°$	E $\leq$ 0.77	#	#
$30°$	E $\leq$ 0.58	#	
.05	F $\leq$ 0.37		
.01	F $\leq$ 0.23		

<u>REJECT</u>

		PC	AF
$15°$	(all others)		
$30°$	(all others)		#
.05	(all others)	#	#
.01	(all others)	#	#

<u>Note</u>.   <u>N</u> = 96;   # Shows the location of data (level); Numbers in parantheses are the degrees of freedom.

The results reveal that, broadly, both perceived contribution and affect show an evidence for a differentiated unit (see Table 4.9). Thus, the results for the member prespective are similar to those of the leader perspective. For perceived contribution, within _eta_ correlation is much higher than the between _eta_ correlation. Although the results for affect are also similar, the difference is not strong enough. This is probably because affective components of the interaction are not strong enough (see results of factor analysis).

All the same, from the subordinate perspective, generally, there is an evidence of LMX (VDL) model of leadership. In other words, the dimensions of perceived contribution and affect provide support to the LMX model from the leader as well as the member perspectives.

Within- and Between-Dyad Analysis

Now, we shift our attention to the dyad containing a leader and a member. Both the leaders and the members evaluate each other on the two dimensions of perceived contribution and affect. The objective is to see whether the leader and the member in a dyad evaluate each other similarly on these two dimensions. For this purpose, a within- and between-dyad analysis was performed. The 152 leader-member dyads in Study 1 were the input in this case. In other words, this is a test of "reciprocity" or "mutuality" of perception.

Table 4.10

WABA: Within-and-Between Dyad Analysis (Study 1)

	PC	A
eta between (151)	.92	.86
eta within (152)	.40	.59
E-Ratio	2.30	1.69
F-Ratio	5.34	2.86

Inferences

WHOLES

	PC	A
$15°$ E $\geq$ 1.30	#	#
$30°$ E $\geq$ 1.73	#	
.05 F $\geq$ 1.31	#	#
.01 F $\geq$ 1.47	#	#

PARTS

$15°$ E $\leq$ 0.77		
$30°$ E $\leq$ 0.58		
.05 F $\leq$ 0.76		
.01 F $\leq$ 0.68		

REJECT

$15°$ E (all others)		
$30°$ E (all others)		#
.05 F (all others)		
.01 F (all others)		

Note.   N = 304; # Shows the location of data (level);
Numbers in parantheses are the degrees of freedom

The analysis shows that between _eta_ correlations for both the dimensions were significantly higher than the within _eta_ correlations (see Table 4.10). This evidence is obviously for a whole dyad level.

The results imply that there is a _mutuality_ of perception between the leader and the member. Thus, if the leader feels that the member's contribution is high on the jobs, the member also feels the same for the leader. Conversely speaking, if the leader feels that the member's contribution is low on the job the member also perceives the same for the leader. This finding is directly in tune with collaboration structure. For the high quality dyad, there is a lot of interaction between the two parties, as the two are interdependent for the achievement of organizational goals. For the lower quality dyad, the interaction is less as the collaboration and interdependence are minimal. Consequently, both the parties perceive less contribution on the job for each other.

On the dimension of affect also, the leader and the member in a dyad displayed mutuality. Blau (1964) points out that the balance of mutuality is crucial for the relationship to grow and develop. In the initial stages of interaction, there are chances of a mismatch between the affective reactions because the parties are still in an evaluative state. The affective reactions of the two parties become mutual once the relationship is established, as is the case in our sample.

SUMMARY

The VDL or the LMX model conceives of a work unit under a leader as composed of leader-member dyads. The dyads in a unit differ in terms of the interdependence of the two parties for the achievement of organizational ends. At the most positive extreme, the two parties--the leader and the member--are totally dependent on each other; at the most negative end, there is very little interdependence. Thus, any measure of LMX must take into consideration the different aspects of this interdependence. Also, since one is focusing on the dyad, LMX must test the reciprocity of perception in the dyad. This would mean evaluating LMX from both the leader and the member perspectives.

A review of literature for the various operationalizations shows that the LMX measure has been constantly in transition. Besides this, all the measures are unidimensional and do not attempt to test reciprocity, although in a few studies, LMX has been measured from the leader perspective.

An attempt is made to develop a scale that would overcome the limitations of the earlier measures. Theoretically, three dimensions are identified that can be tested both from the leader and the member perspectives. When the scale, based on these dimensions, is subjected to a factor analysis, two factors emerge. The two factors are the perceived contribution of the other party in the dyad and the mutual affection between the two of them. The same two dimensions emerge from both the leader and the member perspectives. Perceived contribution seems to be

stronger than affect from both the perspectives.

Next, we pose the question: do the elements of perceived contribution and affect occur at a group level, or are they different for different members? The leader does evaluate different members differently on both the aspects. The different members also evaluate their leaders differently on the above mentioned two dimensions. This points towards a differentiated unit. This also means that the different members will have different job related attitudes and behaviors. This contention is examined in Chapter 6.

Finally, the analysis revealed a mutuality in the leader's and the member's evaluations of each other. This means that some consequent leader activities and behaviors can be predicted by the leader's evaluation of the member's perceived contribution and the affection between the two.

Quality of Interactions: Some Antecedents

An Overview

In the last chapter, we provided evidence for the fact that the leader's interaction with the subordinates varies in a work-group. The next logical step is to identify the variables that are instrumental in causing unit differentiation. It is, hence, a search for the variables on which the quality of interaction is contingent. The present chapter is an attempt in this direction. One point needs to be noted at the outset: since we are focusing on interaction between two individuals, the antecedents are seen as the interaction of variables related to the two of them. It is a typical person-environment interaction where, in some cases, the other person of the dyad is the environment. Investigations are broadly aimed at ascertaining whether the dyadic interactions are a function of (i) their (leaders' and members') general attitudes towards work; (ii) more direct leadership orientations; or (iii) broad organizational factors with leadership superimposed on it.

After presenting a brief foreword in the first part, the three major sets of hypotheses are discussed in the next three parts. The second part contains the relevant material on personal orientations, the third part deals with leadership orientations, and the fourth contains the details of climate perceptions. Each of the three parts contains four broad

sections--the background, some conjectures, results and discussion, and comments. As is obvious, the section on the background contains an overview (update) of the relevant variables. Based on this review, some hypotheses are advanced in the next section titled "some conjectures." Results of these hypotheses are presented and discussed in the third section. It needs to be mentioned here that the results are presented and discussed hypotheses-wise. Thus, the section is further divided into relevant subsections (depending on the hypotheses). Some hypotheses were tested both in Study 1 and Study 2, the results of which are presented and discussed seperately in the relevant subsections. After this detailed section of results and discussion, some general comments are made about the major findings.

Finally, the fifth and the last part contains the major findings and broad conclusions.

A FOREWORD

Before we go on to discuss the relevant variables used in the investigations, the general nature of hypotheses needs to be mentioned. Since our focus is on the quality of interaction, it's determinants are also seen as an interaction of variables related to the leaders and the members.

Interactional psychology has emerged as an answer to the person-situation controversy. As Bowers (1973, p. 307) puts it,

> ... both the trait and the situationist positions are
> inaccurate and misleading and that a position stressing
> the interaction of the person and the situation is both
> conceptually satisfying and empirically warranted.

Thus, the organization-related phenomena like leadership,
socialization, etc. are understood in terms of person by
environment interaction.

In the context of leadership, the recent emphasis on
contingency approaches seems to be a manifestation of
interactional psychology. Whereas some theorists (e.g., Hersey &
Blanchard, 1977; Sinha, 1980; Vroom & Yetton, 1973) focus on the
interaction between leadership behavior and situations, others
(e.g., Fiedler, 1967) focus on the trait (orientation) by
situation interaction. These macro level average theories of
leadership study the interactions to determine the effectiveness
of a leader.

In the micro level framework of leadership, the focus is on
the dyad--consisting of a leader and a member. The basis of unit
differentiation (quality of exchange) is the key variable, which
needs to be understood in interactional terms. Thus, the
relevant personal and situational variables need to be
identified. Also, since the construct is based on the
interaction between the leader and the member, an interaction of
the variables related to the two of them will yield fruitful
insights.

PERSONAL ORIENTATIONS

The Background

As was mentioned in Chapter 1, Graen and Cashman (1975) pointed out the need to study the <u>compatibility</u> of the personal orientations of the leader and the member. Also, it was mentioned that the leader evaluates the motivations of the members which is the basis of later quality of exchange. The leader evaluates the member in the framework of his or her own motivations. Hence, we take the need orientations of the two as a starting point.

Since the organization is conceived of as a collection of interacting and interdependent individuals, the individual needs and motives (in the context of work situation) cannot be isolated from more direct organizational phenomena. We begin with an understanding of the term "need" before examining it's relevance to the organizational framework.

> A need is a construct (a convenient fiction or hypothetical concept) which stands for a <u>force</u> ... in the brain region, a force which organizes perception, apperception, intellection, conation and action in such a way as to transform in a certain direction an existing, unsatisfying situation. A need is sometimes provoked directly by internal processes of a certain kind ... but more frequently (when in a state of readiness) by the occurrence of one of a few commonly effective press [environmental forces] (Murray, 1938, p. 123).

Murray identified a list of twenty needs. The list included the needs for abasement, achievement, affiliation, aggression, autonomy, counteraction, defendance, deference, dominance,

exhibition, harmavoidance, infavoidance, nurturance, order, play, rejection, sentinence, sex, succorance, and understanding. Of these 20 needs, four--needs for power, achievement, affiliation, and autonomy--are of considerable interest to work behavior (Atkinson, 1964; McClelland, Atkinson, Clark, & Lowell, 1953). Thus, the present work examines these four needs, which are understood as follows.

Need for Achievement (n Ach). It is defined as the competitive behavior aimed towards excellence (McClelland et al., 1953). High n Ach people (i) assume personal responsibility for completing the task, (ii) set moderately challenging goals and take calculated risks--that is, they set challenging but realistic goals, (iii) look for concrete feedback on task performance, and (iv) have a complete involvement in the task and it's completion. Low need achievers, on the contrary, prefer jobs that are done jointly by a number of people and involve low risks.

Need for Power (n Pow). It is a desire to influence people and control the environment around self. According to Litwin and Stringer (1968, pp. 18-19), people high on n Pow have the following characteristics. They

> usually attempt to influence others directly--by making
> suggestions, by giving their opinion and evaluations,
> and by trying to talk others into things. They seek
> positions of leadership in group activities; whether
> they become leaders or are seen only as "dominant
> individuals" depends on other attributes such as
> ability and sociability. They are usually verbally
> fluent, often talkative, sometimes argumentative. Men
> with a strong need for power are seen by others as
> forceful and outspoken, but also as hard-hearted and

demanding (emphases in original).

Need for Autonomy (n Aut). "It is a desire for independence and for freedom from any kinds of constraints" (Steers & Porter, 1987, p. 62). People with high n Aut (i) like to work independently on jobs, (ii) be in command of their work speed, and (iii) do not like the interference of rules and regulations on their jobs (Birsch & Veroff, 1966).

Need for Affiliation (n Aff). It is defined as "attraction to another organism in order to feel reassured from the other that the self is acceptable" (Birsch & Veroff, 1966, p. 65). People with high n Aff are characterized by

(1) a strong desire for approval and reassurance from others; (2) a tendency to conform to the wishes and norms of others when pressured by people whose friendship they value; and (3) a sincere interest in the feelings of others (Steers & Porter, 1987, p. 62).

These four needs are taken as relatively fixed personality orientations. Universalists, while theorizing leadership, would place them in the category of traits. Most of the studies of need orientations have concentrated on delineating their importance in predicting leadership effectiveness.

Need for Achievement has been shown to be an important need for the leaders to be effective (McClelland, 1961; McClelland & Winter, 1969), as it has been shown to predict managerial success reliably (Ansari, Baumgartel, & Sullivan, 1982). The rate of career progress of managers has been shown to be positively related with their n Achs (e.g., Meyer & Walker, 1961). However, Steers and Porter (1987) note that since high n Ach managers

are more concerned about gaining independence on and responsibility for the job, they are less likely to be effective when they have to manage people.

Need for power is a much studied value orientation in the context of leadership in organizations. As Zaleznik (1970, p. 47) notes,

> whatever organizations may be (problem-solving instruments, sociotechnical systems, reward systems, and so on), they are political structures. This means that organizations operate by distributing authority and setting a stage for the exercise of power.

Consequently, "power is said to be institutionalized in leadership roles or offices" (Winter & Stewart, 1978, p. 400, emphases in original). Thus, there are required environmental presses in the role of the leader, for $\underline{n}$ Pow to be satisfied. The next question obviously relates to the effectiveness. Although Shaw and Harkey (1976) report that groups under the ascendant leaders perform better than the groups under nonascendant leaders, we do not make a definitive statement of this kind. It is worthwhile to look at McClelland's (1970) understanding of $\underline{n}$ Pow. He identified two aspects of $\underline{n}$ pow in leaders: personal and institutionalized powers. Leaders with personal power dominate for the sake of dominating and personal victory, and personal achievements are of prime importance for them. They make their subordinates work for their own selves not for the organizations. They are the likes of feudal lords and exploitative authoritarian leaders. This, obviously, is the dark side of power and is detrimental both to the growth of the

organization and to the people in the organization. Leaders with institutionalized power, on the other hand, work for the attainment of organizational goals and are concerned with the problems of the organization. These are the people who have a sense of fairness, who take personal responsibility on tasks, and who are mature and open to communication.

> Power-oriented managers, when truly concerned about the organization as a whole (instead of themselves) provide the structure, drive and support necessary to facilitate goal-oriented group behavior (Steers & Porter, 1987, p. 65).

McClelland (1970) also reported that leaders with institutionalized power were more effective with respect to subordinate satisfaction and productivity. He found that managers with this face of power were more successful than managers with personal power.

Need for autonomy has not been so well-studied in the context of leadership. Vroom (1959) notes that n Aut is not found in effective or successful managers. Generally managers have to work with subordinates and, hence, need for autonomy has little scope for its's manifestation. Bass (1981) notes that n Aut is one of the least well-satisfied needs of the managers.

Need for affiliation too has not been studied much. All the same, McClelland (1970, p. 104) notes that

> the manager who is concerned about being liked by people tends to have subordinates who feel that they have very little personal responsibility, that organizational procedures are not clear, and that they have little pride in their work group.

Besides studying the individual needs in isolation, there have been attempts to see the joint effects of two or more needs. Andrews (1967) compared the need profiles of managers in highly effective or modern (growing and characterized by high morale) and ineffective or traditional (stagnant with no growth) organizations. He found that upper level managers in the effective organization were higher on $\underline{n}$ Ach as compared to their counterparts in the ineffective organizations. Whereas Presidents of both the companies were high on $\underline{n}$ Pow, the President of the effective organization had moderately high $\underline{n}$ Ach but the President of the ineffective organization was low on $\underline{n}$ Ach. Wainer and Rubin (1969) found that high $\underline{n}$ Ach and moderate $\underline{n}$ Pow of the entrepreneurs were associated with the success of their company. In essence, a combination of $\underline{n}$ Ach and $\underline{n}$ Pow of the upper level managers affects the effectiveness of the organization.

Thus, universalists aim at identifying the need dimensions of managers in predicting the effectiveness of leadership. In the contingency framework, Fiedler (1967) begins with the needs of the leader (low and high LPC). Later he (Fiedler, 1978, p. 61) explained LPC as follows:

> If I cannot work with you, if you frustrated my _need_ to get the job done, you can't be any good in other respects .... The _relationship motivated_ individual (who) sees his or her LPC in more positive terms (emphases added).

The effectiveness of each need is determined by a set of situational variables (for details, see Chapter 1).

Both the universalists and the contingency theorists have the average bias. For them, needs of the leader only are of interest.

Some Conjectures

In the VDL framework, the focus is on the leader-member dyad and any evaluation of the needs or personal orientations has to be done for both of them. It is preposterous to say that only the needs of the leader (who is somebody's subordinate also) get manifested and, hence, affect the working of a group.

In the initial stage of role taking, the leader evaluates the relevant motivations of the members with the backdrop of own needs. We are interested in the <u>interaction</u> of personal orientations of the two. Hence we conceive of a typical situation wherein the work orientation (need) of one member in the dyad serves as a situation for the other member. In the exchange framework, some needs of the other member are valuable because they provide for the expression of one's own needs. Thus five general hypotheses are framed for empirical verifications:

H1: Leaders' perceived contribtion is a function of the <u>interaction</u> of the leaders' and members' personal orientations.

H2: Leaders' affect is a function of the <u>interaction</u> of the leaders' and members' personal orientations.

H3: Members' perceived contribution is a function of the <u>interaction</u> of the leaders' and members' personal orientatins.

H4:   Members' affect is a function of the _interaction_
       of   the   leaders'   and   members'   personal
       orientations.

H5:   Other   measures   of   quality   of   exchange   (from
       members'   perspective)   are   a   function   of   the
       interaction of the leaders' and members' personal
       orientations.

Specifically,   achievement   and   independence   orientations
should follow similarity rule--that is, if both the leader and
the member are high on these dimensions, it should result in a
higher or better quality of interaction. Power orientations of
both the leader and the member are also of interest.   For the
leader high on n Pow, a low n Pow member should be the ideal
choice for collabration and vice versa. Besides the combination
of the same orientations, other interactions are also expected to
affect the quality of interaction. For example, n Ach is
expected   to   be   more   important   in   determining   perceived
contribution than affect, as achievement by definition is more
relevant to actual work situations. Keeping in view McClelland's
(1970) distinction between the two kinds of power, high n Pow of
the leader in combination with the member's orientations can
influence both the leader's perceived contribution and affect.
For a member there are few chances of the satisfaction of n Pow
because of their low power status. Thus, a member high on n Pow
is likely to show more affect for a leader low on n Pow, as it
gives the members a conducive situation to satisfy their power
needs.

Results and Discussion

The above mentioned hypotheses were tested through a 2 x 2 ANOVA. The personal attributes of the leader and the member were divided into "low" and "high" by splitting at the median (see Chapter 3, for details). Nine interactions were tested for every hypothesis.

Table 5.1

Significance of $\underline{F}$-ratios—Leaders' Quality of Interaction as a Function of Interaction of Leaders' and Members' Personal Orientations (Study 1)

PR/CR	Perceived contribution	Affect
LA X MA	ns	ns
LA X MI	ns	.04
LA X MP	ns	ns
LI X MA	ns	ns
LI X MI	ns	ns
LI X MP	ns	ns
LP X MA	ns	ns
LP X MI	ns	ns
LP X MP	ns	ns

Note. $\underline{df}$ = 1/148; LA, LI, and LP are, respectively, leader Achievement, Independence, and Power Orientations, M MI, and MP are, respectively, members' Achievemen Independence, and Power Orientations; PR = Predictor CR = Criterion; ns = not significant.

Affect of the leader too could not be predicted by the interaction of the personal attributes of the two. Only in one case was there a significant interaction—that too marginally (see Table 5.1 and Table 5.3, respectively, for the significance of F-ratios and means). Leader's achievement orientation interacted with the member's independence orientation in predicting the former's affect, F (1,148) = 4.29. A high achievement oriented leader has the highest affect for a member low on independence and the lowest affect for a member high on independence (see Figure 5.1). If at all the personal attributes of the two are important (which is doubtful), probably a high achievement oriented leader likes more dependent (less independent) subordinates, as the subordinates' dependence is a sense of achievement for the leader who does not like a highly independent subordinate. Also, since a leader has to work with a group, an achievement oriented leader would have a liking for such subordinates who depend on him or her for all the decisions. These subordinates also give the leader the satisfaction of taking the credit for the work done (which probably the leader only does because of high n Ach).

Thus, with the exception of one interaction (of the possible 18), hypotheses one and two (H1 and H2) stand unsubstantiated. We will discuss the failure of these two hypotheses after looking at the results of the other three hypotheses.
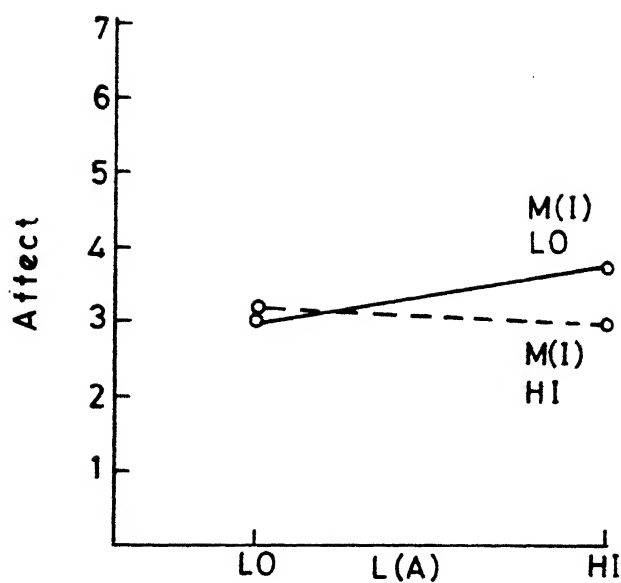
Figure 5.1. Mean affect scores of the leaders (Study 1) as a function of leader's and members' personal orientations. Abbreviations: L=Leaders' personal orientations; M=Members' personal orientations; A=Achievement; I= Independence; LO=Low; HI=High.

Table 5.3

Mean Scores--Leaders' Affect as a Function of the Leaders' and Members' Personal Orientations (Study 1)

	Members	MA		MI		MP	
	Leaders	LOW	HIGH	LOW	HIGH	LOW	HIGH
LA	LOW	13.68 (40)	17.24 (41)	15.30 (42)	15.77 (39)	15.07 (45)	16.00 (36)
	HIGH	16.03 (32)	17.44 (39)	19.11 (28)	15.21 (43)	16.86 (28)	16.77 (43)
LI	LOW	14.00 (38)	16.85 (34)	15.75 (44)	14.71 (28)	14.15 (39)	16.76 (33)
	HIGH	15.53 (34)	17.70 (46)	18.50 (26)	15.94 (54)	17.59 (34)	16.17 (46)
LP	LOW	13.29 (38)	16.47 (32)	14.75 (36)	14.74 (34)	14.67 (36)	14.82 (34)
	HIGH	16.32 (34)	17.92 (48)	18.91 (34)	16.08 (48)	16.81 (37)	17.62 (45)

Note. Same as Table 5.2.

Member's Quality of Interaction

The next three hypotheses (H3 through H5) are concerned with the members' quality of interaction and it's determinants. H3 d H4 were first tested in Study 1 and were retested in Study 2. will discuss the results of both the studies side by side.

Only one interaction significantly determined the members'

perceived contribution in Study 1 (see Table 5.4). The achievement orientation of both the leader and the member jointly

Table 5.4

Significance of F-ratios--Members' Quality of Exchange as a Function of Interaction of Leaders' and Members' Personal Orientations (Study 1)

PR/CR	Perceived Contribution	Affect	LMX
MA X LA	.03	ns	ns
MA X LI	ns	ns	ns
MA X LP	ns	ns	ns
MI X LA	ns	ns	ns
MI X LI	ns	ns	ns
MI X LP	ns	ns	ns
MI X LA	ns	ns	ns
MP X LI	ns	ns	ns
MP X LP	ns	ns	ns

Note.   df = 1/148; LA, LI, and LP are, respectively, leaders' Achievement, Independence, and Power Orientations; MA, MI, and MP are, respectively, members' Achievement, Independence, and Power Orientations; PR = Predictors; CR = Criterion; ns = not significant.

affected the member's perceived contribution in this study, F (1,148) = 4.94. A high achievement oriented member's perceived contribution was maximum for a high achievement oriented leader,

Table 5.5

Mean Scores—Members' Perceived Contribution as a Function of Leaders' and Members' Personal Orientations (Study 1)

Members		MA		MI		MP	
Leaders		LOW	HIGH	LOW	HIGH	LOW	HIGH
LA	LOW	25.51 (40)	22.88 (41)	23.74 (42)	25.59 (39)	24.07 (45)	25.33 (36)
	HIGH	26.34 (32)	26.56 (39)	27.00 (28)	25.33 (43)	27.04 (28)	25.30 (43)
LI	LOW	23.21 (38)	25.91 (34)	24.16 (44)	25.00 (28)	24.41 (39)	25.76 (33)
	HIGH	25.97 (34)	25.96 (46)	26.54 (26)	25.69 (54)	26.26 (34)	25.00 (46)
LP	LOW	22.68 (38)	24.81 (32)	23.44 (36)	23.88 (34)	23.47 (36)	23.85 (34)
	HIGH	26.56 (34)	26.69 (48)	26.74 (34)	26.56 (48)	26.89 (37)	26.42 (45)

Note.   Same as Table 5.2.

whereas for a low $\underline{n}$ Ach leader the perceived contribution of the same member (high $\underline{n}$ Ach) was minimum (see Figure 5.2). This clearly seems to be following the similarity rule. If both of them are high on achievement motivation, both of them set targets of moderate risk, both believe in the completion of the task, and, in essence, each provides the required atmosphere for the other to work. This situation becomes more conducive for the member because the leader can impose his or her way of working on
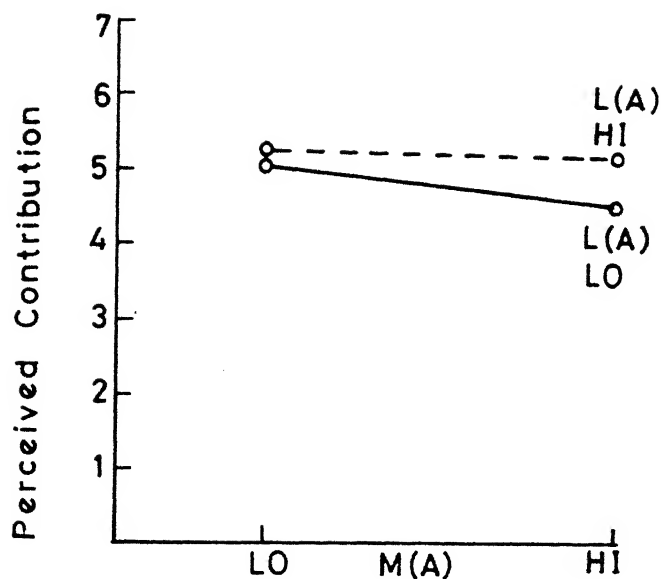
Figure 5·2. Mean perceived contribution scores of the members (Study 1) as a function of members' and leaders' personal orientations. Abbreviations: L(A) and M(A) are leaders' and members' achievement orientations, respectively; LO = Low; HI = High.

Table 5.6

Mean Scores--Members' Affect as a Function of the Leaders' and Members' Personal Orientations (Study 1)

Members		MA		MI		MP	
Leaders		LOW	HIGH	LOW	HIGH	LOW	HIGH
LA	LOW	14.97 (40)	18.68 (41)	15.95 (42)	17.82 (39)	16.22 (42)	17.64 (36)
	HIGH	18.28 (32)	17.85 (39)	17.68 (28)	18.28 (43)	16.36 (28)	19.14 (43)
LI	LOW	16.16 (38)	18.26 (34)	16.43 (44)	18.29 (28)	16.05 (39)	18.45 (33)
	HIGH	16.76 (34)	18.28 (46)	17.00 (26)	17.94 (54)	16.53 (34)	18.46 (46)
LP	LOW	16.37 (38)	17.88 (32)	16.39 (36)	17.76 (34)	16.47 (36)	17.68 (34)
	HIGH	16.53 (34)	18.54 (48)	16.91 (34)	18.27 (48)	16.08 (37)	19.04 (45)

Note.   Same as Table 5.2.

the members; members cannot do the same for the leader. In Study 2 also, only one of the interactions is significant. Leader's power orientation interacts with members' independence to determine the member's perceived contribution (see Table 5.8). A low independence oriented member shows maximum perceived contribution for a leader high on power orientation, whereas high independence oriented member perceives the contribution of a

Table 5.7

Mean Scores--Members' LMX as a Function of Leaders' and Members' Personal Orientations (Study 1)

	Members	MA		MI		MP	
	Leaders	LOW	HIGH	LOW	HIGH	LOW	HIGH
LA	LOW	13.90 (40)	15.63 (41)	14.55 (42)	15.03 (39)	14.38 (45)	15.28 (36)
	HIGH	14.59 (32)	15.05 (39)	15.04 (28)	14.72 (43)	14.82 (28)	14.86 (43)
LI	LOW	13.82 (38)	15.24 (34)	14.61 (44)	14.29 (28)	14.13 (39)	14.91 (33)
	HIGH	14.65 (34)	15.43 (46)	14.96 (26)	15.17 (54)	15.03 (34)	15.15 (46)
LP	LOW	13.55 (38)	15.09 (32)	14.47 (36)	14.03 (34)	13.92 (36)	14.62 (34)
	HIGH	14.94 (34)	15.52 (48)	15.03 (34)	15.46 (48)	15.16 (37)	15.38 (45)

Note.   Same as Table 5.2.

high power oriented leader to be the least (Figure 5.3a).   This follows a complimentarity rule. A less independent (more dependent) member gives in to the leaders' power orientation and the two get along together well. On the other hand, a highly independence oriented member does not give in to the power motivated leader.
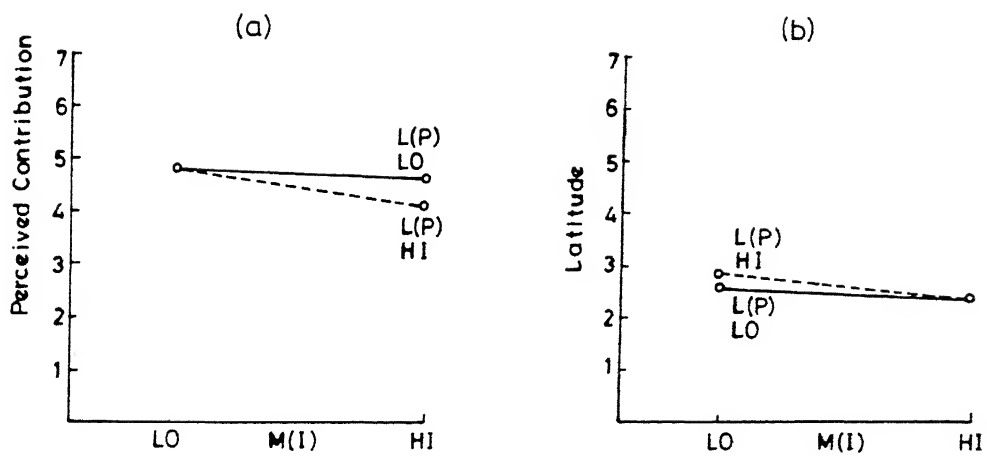
Figure 5·3. Mean quality of exchange scores of the members (Study 2) as a
function of leaders' and members' personal orientations. L = Leaders'
personal orientations; M = Members' personal orientations;
I = Independence; P = Power; HI = High; LO = Low.

As regards the affect of the member (H4), none of the
interactions either in Study 1 (see Table 5.4 and Table 5.6 for
the significance of F-ratios and means, respectively) or in Study
2 (see Table 5.8 and Table 5.10 for the significance of F-ratios
and means, respectively) was significant. Thus, only 2

Table 5.8

Significance of F-ratios--Members' Quality of Exchange as a
Function of Interaction of the Leaders' and Members' Personal
Orientations (Study 2)

PR / CR	Perceived Contribution	Affect	Attention	Latitude
MA X LA	ns	ns	ns	ns
MA X LI	ns	ns	ns	ns
MA X LP	ns	ns	ns	ns
MI X LA	ns	ns	ns	ns
MI X LI	ns	ns	ns	ns
MI X LP	.05	ns	ns	.05
MP X LA	ns	ns	ns	ns
MP X LI	ns	ns	ns	ns
MP X LP	ns	ns	ns	ns

Note. df = 1/92; LA, LI, and LP are, respectively, leaders'
Achievement, Independence, and Power Orientations;
MA, MI, and MP are, respectively, members'
Achievement, Independence, and Power Orientations,
PR = Predictors; CR = Criterion; ns = not significant.

Table 5.9

Mean Scores--Members' Perceived Contribution as a Function of the Leaders' and Members' Personal Orientations (Study 2)

Leaders		LI		LP		LA	
Members		LOW	HIGH	LOW	HIGH	LOW	HIGH
MI	LOW	20.73 (22)	23.54 (28)	23.89 (23)	23.96 (27)	23.56 (27)	20.83 (23)
	HIGH	23.41 (17)	20.93 (29)	23.08 (22)	20.50 (24)	20.59 (22)	23.00 (24)
MP	LOW	22.44 (16)	23.46 (35)	22.74 (27)	23.58 (24)	23.00 (30)	23.33 (21)
	HIGH	21.52 (23)	20.23 (22)	21.56 (18)	20.44 (27)	21.00 (19)	20.81 (26)
MA	LOW	19.44 (16)	21.90 (31)	21.79 (29)	19.89 (18)	21.96 (29)	19.61 (18)
	HIGH	23.61 (23)	22.58 (26)	23.12 (16)	23.03 (33)	22.60 (20)	23.38 (29)

Note.   N = 96; For abbreviations, see Table 5.2.

interactions (of the possible 36) significantly predicted the quality of interaction from the members' perspective. Thus, hypotheses 3 and 4 (H3 and H4) too do not find empirical support.

Finally, in hypothesis 5, other measures of quality of exchange were taken. LMX was taken up in Study 1 and Attention

Table 5.10

Mean Scores--Members' Affect as a Function of the Leaders' and Members' Personal Orientations (Study 2)

| | Leaders | LI | | LP | | LA | |
	Members	LOW	HIGH	LOW	HIGH	LOW	HIGH
MI	LOW	18.64 (22)	16.43 (28)	18.96 (23)	16.07 (27)	18.44 (27)	16.17 (23)
	HIGH	18.47 (17)	15.93 (29)	17.14 (22)	16.62 (24)	17.68 (22)	16.12 (24)
MP	LOW	21.31 (16)	16.00 (35)	18.48 (27)	16.75 (24)	18.63 (30)	16.29 (21)
	HIGH	16.65 (23)	16.45 (22)	17.44 (18)	15.96 (27)	17.26 (19)	16.04 (26)
MA	LOW	16.81 (16)	14.81 (31)	16.69 (29)	13.56 (18)	16.72 (29)	13.50 (18)
	HIGH	19.78 (23)	17.81 (26)	20.56 (16)	17.85 (33)	20.10 (20)	17.79 (29)

Note. N = 96; For abbreviations, see Table 5.2.

and Latitude were taken in Study 2. LMX could not be predicted by any interaction (see Table 5.4 and Table 5.7 for significance of F-ratios and means, respectively). The significance of interaction results (F-ratios) for attention and latitude (both in Study 2) are given in Table 5.8. The means of attention and latitude are contained in Table 5.11 and Table 5.12,

Table 5.11

Mean Scores--Members' Attention as a Function of the Leaders' and
Members' Personal Orientations (Study 2)

	Leaders	LI		LP		LA	
	Members	LOW	HIGH	LOW	HIGH	LOW	HIGH
MI	LOW	14.41 (22)	14.86 (28)	16.35 (23)	13.22 (27)	16.00 (27)	13.09 (23)
	HIGH	17.41 (17)	14.24 (29)	14.82 (22)	15.96 (24)	14.68 (22)	16.08 (24)
MP	LOW	17.50 (16)	15.34 (35)	15.70 (27)	16.37 (24)	15.93 (30)	16.14 (21)
	HIGH	14.48 (23)	13.27 (22)	15.44 (18)	12.85 (27)	14.58 (19)	13.38 (26)
MA	LOW	14.44 (16)	14.29 (31)	14.69 (29)	13.78 (18)	14.86 (29)	13.50 (18)
	HIGH	16.61 (23)	14.85 (26)	17.25 (16)	14.91 (33)	16.20 (20)	15.31 (29)

Note.   N = 96; For abbreviations, see Table 5.2.

respectively.   It can be seen from the tables that none   of   the
interactions   for   attention   reaches   its   significance   level.
However,   for   latitude   (Study   2),   one   interaction--power
orientation   of   the leader and independence orientation   of   the
member--was   significant   (see Table 5.8 for significance   of   F-
ratios).   It is evident that a low independence oriented   member

Table 5.12

Mean Scores—Members' Latitude as a Function of the Leaders' and Members' Personal Orientations (Study 2)

Leaders		LI		LP		LA	
Members		LOW	HIGH	LOW	HIGH	LOW	HIGH
MI	LOW	13.18 (22)	12.61 (28)	13.00 (23)	14.17 (27)	12.93 (27)	12.61 (23)
	HIGH	13.53 (17)	11.76 (29)	11.77 (22)	11.74 (24)	11.86 (22)	12.92 (24)
MP	LOW	14.87 (16)	12.43 (35)	13.56 (27)	12.79 (24)	13.67 (30)	12.52 (21)
	HIGH	12.26 (23)	11.77 (22)	12.17 (18)	11.93 (27)	11.95 (19)	12.08 (26)
MA	LOW	12.44 (16)	12.13 (31)	12.72 (29)	11.44 (18)	12.86 (29)	11.22 (18)
	HIGH	13.96 (23)	12.23 (26)	13.50 (16)	12.82 (33)	13.20 (20)	12.93 (29)

Note. $\underline{N}$ = 96; For abbreviations, see Table 5.2.

gets (or perceives) maximum latitude from a leader high on power, whereas a high independence oriented member gets minimum latitude from the power oriented leader (see Figure 5.3b). The finding is identical with that of perceived contribtion and the explanation, too, is the same. Thus, in general, hypothesis 5 (H5) also stands rejected in our present investigations.

Comments

Barring a very few (almost negligible) interactions, the personal attributes of the leader and the member do not interact to determine the quality of interaction (also exchange), neither for the member perspective nor for the leader perspective. Whereas the leaders' perspective was evaluated only in Study 1, members' perspective was evaluated in both the studies. Almost identical results from both the persectives provide validity and support to the present findings. Also, it is not only the quality of interaction measures developed in this study that could not be determined by this interaction but the other measures (LMX, attention, and latitude) also could not be. This shows that, no matter what measures of exchange we take, they seem to be rather independent of the interaction of the personal attributes of the two. In view of the fact that interaction hypotheses do not get substantiated from the present two sets of data, some additional comments are in order.

To begin with, leaders and members evaluated their own attitudes towards work. It is not necessary that the perception of one's own personal orientations match with the other's perception of the self. We presumed that the evaluation of one's own attributes are objective evaluations and others also perceive them to be the same. Thus, a more viable and practical hypothesis will be the evaluation of one's own personal attributes and perception of the same attributes in the relevant other.

Secondly, probably the personal attributes of the two are not so important in determining the interaction between a leader and a member. What we are measuring are very personal attitudes (though towards work) and they do not play such an important role in leader-member interactions. These attitudes probably may be operative in very close and intimate relationships, like spouse selection (Peterson, 1977, 1979), where one partner actually constitutes total climate or environment for the other. The leader-member interactions are primarily work relations which operate in the backdrop of organizational settings. Hence, the broader organizational variables, which are relevant to the leadership situation, probably are more important. Also, the attitudes directly related to leadership (like style and it's equivalent preference) should be more important determinants. This does not mean that the motives and attitudes of the two are not important. They are important but only in interaction with other more direct variables like climate, etc. Thus, in the initial stage of role taking, the leader does evaluate the members' relevant motives and orientations, but the relevance of these is determined by other factors (e.g., the nature of the job). The members' choice of the leader, too, is guided by other practical considerations.

Finally, our conception of interaction is based on statistical interaction. As Schneider (1983, p. 8) notes, "in field settings ... extremes of person variables are not typically observed", this effect gets compounded when the sample size is

relatively small. In both the studies, the number of leaders is much less (67 in Study 1 and 26 in Study 2). This could also be a probable cause for the lack of interaction. Lack of statistical interaction, however, (measured through ANOVA or multiple regression) does not necessarily mean lack of interaction of variables in real-life situations (Schneider, 1983).

Next, we move on to more direct leadership orientations-- leaders' styles and members' attitude towards these styles.

LEADERSHIP ORIENTATIONS

The Background

In Chapter 1, it was concluded that the penchant of a leader for a particular style is not refuted. Some leaders are probably more participative than others. It was also mentioned that the need is to evaluate how the average _and_ dyadic leaderships combine. Thus, we attempt at a combination of the two.

We begin with the understanding that leaders do indulge in particular ways of leading. These leader behaviors or styles are relatively fixed (at least across subordinates as average theorists presume) and form a part of leaders' orientations towards leading. How these orientations combine with that of subordinates will be taken up later. First, the appropriate orientations of the leader are to be sorted out. For this, we take the Indian theory of and researches on leadership.

In the Indian setting, too, as elsewhere, the phenomenon of leadership has been studied quite extensively. The earlier studies were predominantly concerned with replicating the western studies in the Indian setting. Researchers were interested in ascertaining whether the styles considered effective in the west were effective in India or not (Sinha, 1972). The focus of western leadership, after the human relations movement, was on the normative aspect of participative leadership style. The results were mixed and inconclusive. While there were some studies that emphasized effectiveness of a participative style (e.g., Daftuar & Krishna, 1971; Kakar, 1971; Pandey, 1976; Pestonjee, 1973; Singh & Pestonjee, 1974; Venkoba Rao, 1970), others (e.g., Saiyadain, 1974) showed other styles (e.g., autocratic) to be more effective. In the midst of this debate, Sinha (1974) reported that participative style might fall flat on its face if the cultural settings are not conducive to it. As a consequence, an alternative theory of nurturant-task leadership (NT) was developed (see Chapter 1, for the details of this theory). It is worthwhile to note here that Indian studies, in general, and NT formulation in particular, go a step further and identify the values and beliefs of the subordinates. Indian subordinates have been shown to have excessive dependence on their leader (Chattopadhyay, 1975; Sinha, 1970), a readiness to accept their leaders' authority (Kakar, 1971), and a tendency to maintain personalized relationships with their leaders at work (De, 1974; Sinha & Sinha, 1974). As Ansari (1990, p. 35) notes:

Thus, NT leader is effective for those subordinates who want to maintain dependency, a personalized relationship, and a status differential.

Although the need system of the subordinates is identified and the effectiveness of a style is shown to be contingent on it, the evaluation is at a macro level and the subordinates are treated as a collectivity. Sinha (1980) identifies the aspect of subordinate maturity as a basis for shift in leadership style (for mature subordinates a shift from NT to participative style of leadership), it is only at the group level. This theory also, like all other average theories, overlooks the leadership process as it occurs within a work-group.

Some Conjectures

In the VDL framework, the focus is on leader-member dyads. As already mentioned, we are interested in how leadership orientations of the leaders themselves and the members combine in determining the quality of interaction. It needs to be mentioned here that the objective is not to work out the ideal or effective style but to diagnose how leadership actually occurs in a group.

We begin with the assumption that whereas leaders have a particular style of leadership, members too have particular and specific attitudes towards these leadership styles. These leadership styles (for the leaders) and the members' preference for these styles are not too different from their general attitudes towards work, like achievement, independence, or power orientations. Whereas $\underline{n}$ Ach, $\underline{n}$ Pow, and $\underline{n}$ Aut (or

independence) are broad attitudes towards work, leadership
attitudes are specifically relevant to leadership situations.
From the member perspective, what we are evaluating is their
preference for a style as subordinates. Thus, what we
essentially see is a match between the leaders' own styles and
members' preference for them. That is, we are looking for a
similarity rule in this interaction. This essentially means that
if there is a match between leaders' style and members'
preference for the style, it is a conducive situation for the two
to work amicably. Hence, it should influence perceived
contribution positively. Besides creating an efficient working
relations, this match (interactions) may produce affective
outcomes too. In a reward-cost framework,

> if we assume that in many value areas an individual is
> in need of social support for his opinions and
> attitudes then another person's agreeing with him will
> constitute a reward for him .... Thus two people with
> similar values may provide rewards for each other
> simply by expressing their values. This may also be a
> low cost operation, since it is easy for a person to
> express the values he really feels (Thibaut & Kelley,
> 1959, p. 3).

For this purpose, three leadership styles--authoritarian,
nurturant-task and participative--were taken. The leaders
described their own styles and the members rated their preference
for these styles. In line with the above arguments, the
following general hypotheses for the match of leadership
orientations (leaders' self-rated style and members' preference
for them) are framed.

Since these hypotheses were tested in Study 2, only the

members' perception of the quality of interaction were taken.
Yet, equivalent hypotheses can also be tested for the leaders'
perception of the quality of interaction (which is not done in
this report).

H6:   Members' perceived contribution is a function of
        the match between leadership orientations of the
        leaders and members.

H7:   Members affect is a function of the match between
        leadership orientations of the leaders and members.

H8:   Other measures of quality of exchange (LMX,
        attention, and latitude) are each a function of
        the match between leadership orientations of the
        leaders and members.

Specifically, the interaction of nurturant-task leadership should
be more operative for perceived contribution and the interaction
of participative leadership should be more pronounced for the
members' affect. So far as the authoritarian style is concerned,
members might show affect for the leader but the genuinity of the
affect is doubtful.

Results and Discussion

The above three hypotheses were tested with ANOVA, as the
two predictors were taken from two different respondents (one
from the leader, the other from the member). Since these
hypotheses were tested in Study 2 only, they involved only
members' quality of exchange. All the four measures of quality
of exchange--perceived contribution, affect, attention, and
latitude are dealt with separately under separate heads.

Members' Perceived Contribution

The results of the first hypothesis (H6) are reported in Tables 5.13 and 5.14. Of the three match interactions, two significantly predict members' perceived contribution. The authoritarian and participative leadership orientations show significant interactions. A look at the means (Table 5.14) shows that those members who have a high preference for authoritarian style of leadership perceive a high authoritarian leaders' contribution (PC) maximum on the job, whereas the same

Table 5.13

F-ratios and their Significance--Members' Quality of Interaction as a Function of the Interaction of Leadership Orientations (Study 2)

CR PR	LS(F)xSP(F)	LS(N)xSP(N)	LS(P)xSP(P)
Perceived Contribution	7.99^a	3.36	5.05^b
Affect	4.68^b	2.80	3.67^b
Attention	18.82^a	7.31^a	8.67^a
Latitude	15.07^a	7.76^a	5.47^a

Note. $df = 1/92$; LS = Leadership Style of the leaders; SP = Style Preference of the members; F = Authoritarian Style; N = Nurturant-task Style; P = Participative style; CR = criterion; PR = Predicator; a $p < .01$; b $p < .05$.

Table 5.14

Mean Scores--Members' Perceived Contribution as a Function of Leaders' and Members' Leadership Orientations (Study 2)

SP		SP(F)		SP(N)		SP(P)	
	LS	LOW	HIGH	LOW	HIGH	LOW	HIGH
LS(N)	LOW	22.44 (16)	23.05 (22)	**23.83** (23)	**21.20** (15)	22.20 (20)	23.44 (18)
	HIGH	20.96 (24)	22.09 (34)	**20.35** (34)	**23.42** (24)	24.31 (32)	18.31 (26)
LS(P)	LOW	20.47 (17)	22.39 (33)	20.63 (30)	23.40 (20)	**24.50** (28)	**18.23** (22)
	HIGH	22.35 (23)	22.56 (23)	23.00 (27)	21.68 (19)	**22.33** (24)	**22.59** (22)
LS(F)	LOW	**23.74** (23)	**21.00** (31)	20.81 (32)	24.14 (22)	23.25 (28)	21.00 (26)
	HIGH	**18.59** (17)	**24.28** (25)	22.96 (25)	20.53 (17)	23.79 (24)	19.56 (18)

Note.   N = 96; LS = Leadership Style; SP = Style Preference; N = Nurturant-task; P = Participative; F = Authoritarian.

contribution is minimum when the leader is authoritarian but the member has low preference for authoritatian leadership (Figure 5.4a). As was mentioned earlier, in high quality dyads, the interdependence between the leader and the member was very high. For the member this dependence is crucial, on one hand, when it can help the member in career progress. On the other hand, because of incompatibility, it might stagnate all growth at the

Figure 5·4. Mean quality of interaction scores of the members as a function of leadership style (leaders') and style preference (members'). Abbreviations: LS = Leadership style; SP = Style Preference; F = Authoritarian; P = Participative; NT = Nurturant task; HI = High; LO = Low.

Table 5.15

Mean Scores--Members' Affect as a Function of Leaders' and Members' Leadership Orientations (Study 2)

SP	SP(F)		SP(N)		SP(P)	
LS	LOW	HIGH	LOW	HIGH	LOW	HIGH
LS(N) LOW	16.62 (16)	15.41 (22)	18.33 (23)	14.21 (15)	11.73 (20)	18.94 (18)
LS(N) HIGH	17.75 (24)	19.95 (34)	18.33 (34)	19.48 (24)	11.73 (32)	18.94 (26)
LS(P) LOW	14.82 (17)	15.39 (33)	13.37 (30)	17.95 (20)	18.43 (28)	11.09 (22)
LS(P) HIGH	18.74 (23)	19.78 (23)	19.63 (27)	18.74 (19)	18.27 (24)	20.17 (22)
LS(F) LOW	19.35 (23)	16.55 (31)	15.84 (32)	20.50 (22)	20.11 (28)	15.19 (26)
LS(F) HIGH	14.00 (17)	18.00 (25)	16.96 (25)	15.53 (17)	18.21 (24)	13.94 (18)

Note.   Same as Table 5.14.

same time.   Thus, it is unlikely that a member with little preference for authoritarian leadership will collaborate with the leader on unstructured tasks. Such members maintain a contractual relationship with the leader. Consequently, they perceive leaders' contribution to be less on the job. Only those members who have a preference for authoritarian leadership will collaborate with authoritarian leaders on the job.

Table 5.16

Mean Scores--Members' Attention as a Function of Leaders' and Members' Leadership Orientations (Study 2)

SP		SP(F)		SP(N)		SP(P)	
	LS	LOW	HIGH	LOW	HIGH	LOW	HIGH
LS(N)	LOW	15.12 (16)	16.23 (22)	**16.71** (23)	**13.00** (15)	15.60 (20)	15.94 (18)
	HIGH	13.83 (24)	15.03 (34)	**14.20** (34)	**16.78** (24)	17.41 (32)	11.00 (26)
LS(P)	LOW	13.71 (17)	14.64 (33)	12.90 (30)	16.45 (20)	**17.29** (28)	**10.55** (22)
	HIGH	14.83 (23)	16.74 (23)	16.33 (27)	15.00 (19)	**16.04** (24)	**15.50** (22)
LS(F)	LOW	**16.96** (23)	**14.32** (31)	14.09 (32)	17.68 (22)	17.07 (28)	13.92 (26)
	HIGH	**10.47** (17)	**17.22** (25)	15.08 (25)	13.23 (17)	16.29 (24)	11.72 (18)

<u>Note</u>. Same as Table 5.14.

A similar interaction for participative orientations too was significant. It can be seen from Table 5.14 and Figuer 5.4b that members who have a low preference for participative style perceive a low participative leaders' contribution to be the most. The same contribution is minimum when the leader is low on participation but the member has a high preference for participative style. A low-low match in this case is understandable, since participative leader is more concerned with

Table 5.17

Mean Scores—Members' Latitude as a Function of Leaders' and Members' Leadership Orientations (Study 2)

SP	SP(F)		SP(N)		SP(P)	
LS	LOW	HIGH	LOW	HIGH	LOW	HIGH
LS(N) LOW	12.75 (16)	12.82 (22)	**13.91** (23)	**11.07** (15)	12.05 (20)	13.61 (18)
HIGH	13.00 (24)	12.23 (34)	**11.85** (34)	**13.54** (24)	14.03 (32)	10.73 (26)
LS(P) LOW	12.88 (17)	12.21 (33)	12.10 (30)	12.95 (20)	**13.82** (28)	**10.68** (22)
HIGH	12.91 (23)	12.83 (23)	13.33 (27)	12.21 (19)	**12.62** (24)	**13.14** (22)
LS(F) LOW	**13.36** (23)	**11.74** (31)	12.44 (32)	13.86 (22)	13.61 (28)	12.38 (26)
HIGH	**10.41** (17)	**14.74** (25)	13.00 (25)	10.94 (17)	12.87 (24)	11.22 (18)

<u>Note</u>.   Same as Table 5.14.

the feelings of the subordinates and less with the job.   It is likely that actual contribution to work is not so much predicted by a high-high match.   For the lowest contribution, it is a case of mismatch because low in participation does not necessarily mean (at all times) high on job or task. A failure for the nurturant-task interaction to yield significant result is difficult to explain. Thus, hypothesis 6 (H6) in general finds support.

Members' Affect

The results for hypothesis 7 (H7) are reported in Tables 5.13 and 5.15. Here also the same two interactions--authoritarian and participative--are significant (Table 5.13). An examination of Table 5.15 reveals that members who have a low preference for authoritarian style have maximum affect for leader low on authoritarian style. Also members who have a low preference for authoritarian style have minimum affect for leaders high on authoritarian style (Figure 5.4c). Although this finding also follows the similarity hypothesis, it is interesting to compare this result with that of perceived contribution (PC). For PC, a high-high match is more important. This shows that a high preference for anthoritarian style is limited to working relationships. That is, affect or liking is not predicted so much by high preference for authoritarian style. Affect is predictably low for a high authoritarian leader especially of members who have a low preference for authoritarian style.

Participative interaction, too, was significant (Table 5.13). Members who have a high preference for participative style have highest affect for leaders high on participative style. In addition, the same members have least affect for a leader low on participation (Table 5.15 and Figure 5.4d). The results follow the similarity rule but again it is interesting to compare these findings with those of perceived contribution. Leaders' participation (high or low) significantly influences members' quality of interaction but affect is predicted better by

high-high match and perceived contribution by a low-low match. Thus high participative style of the leader is more operative for the affect dimension. Hypothesis 7, too, finds support in general.

Members' Attention

The F aratios and their significance level for attention are given in Table 5.13. The means for the same are given in Table 5.16. A look at the two tables shows that the interaction of authoritarian and participative styles are the same as for perceived contribution.

So far as the authoritarian style interaction is concerned, attention is maximum when both the leadership style and style preference (by the members) are high. Attention is lowest when the leader is high on authoritarian style but the member has a low preference for the same style (Figure 5.5a).

For the participative style interaction, attention is maximum when both these orientations are high but attention is minimum when the member has a high preference for participative style but the leader is low on this style (Figure 5.5c).

Additionally, the interaction of nurturant-task interaction also shows significant results. Attention is the highest when both these orientations are high and it (attention) is minimum when the members have a high preference for nurturant-task style and the leader is low on it (Figure 5.5b).

Clearly, a match of leadership orientations leads to more
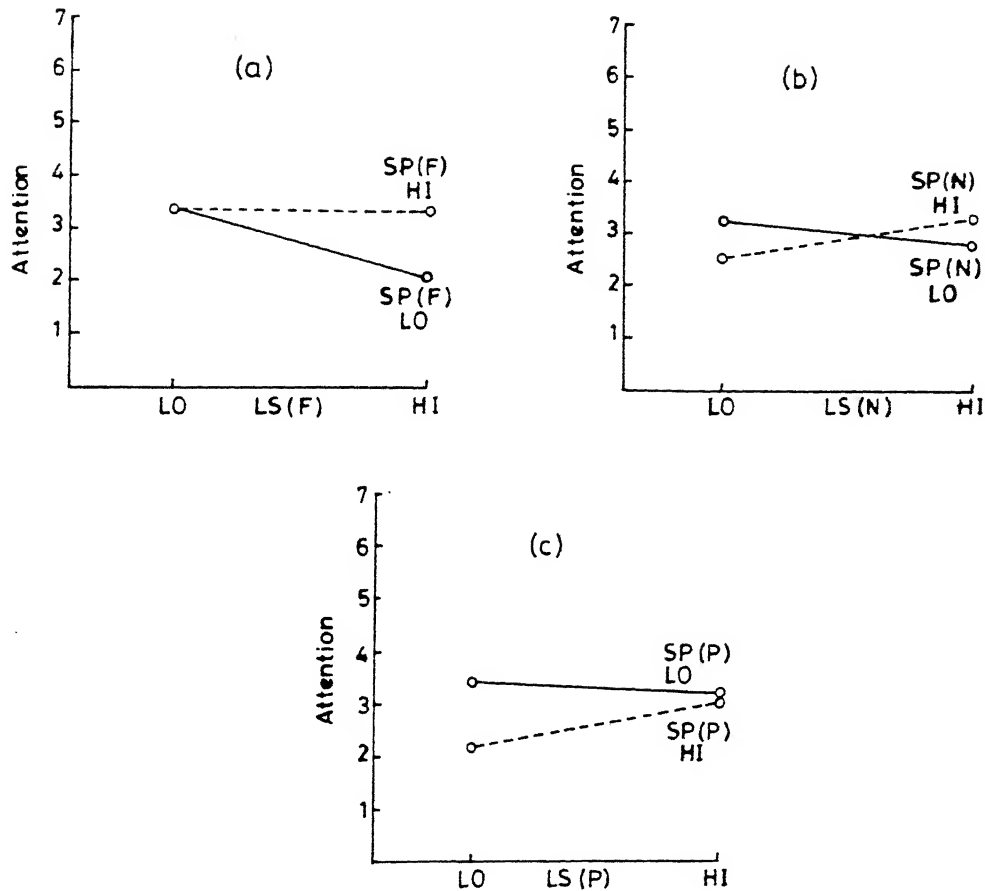
Figure 5·5. Mean attention scores of the members as a function of leadership style (leaders') and style preference (members'). Abbreviations: LS = Leadership style; SP = Style preference; F = Authoritarian; P = Participative; N = Nurturant-task; HI = High; LO = Low.

attention and a mismatch leads to less attention. This effect gets more pronounced for participative and nurturant-task orientations, as these orientations are more directly related to attention.

Members' Latitude

The F-ratios and their significance are given in Table 5.13 and the means are reported in Table 5.17. All the three interactions are significant.

For the authoritarian interaction, latitude is maximum when both these orientations are high but it (latitude) is minimum when the leader is high on authoritarian style but the members have a low preference for this style (Figure 5.6a).

Leadership orientations towards participative style also show a significant interaction. Strangely enough, latitude is maximum when both these orientations are low and it (latitude) is the least when the leader is low on this style but the member has a high preference for this style (Figure 5.6c).

Finally, the interaction of nurturant-task orientations, too, is significant. Latitude is maximum when both the orientations are low and it is minimum when members have a high preference for this style but the leader is low on it (Figure 5.6b).

Again, a match of leadership orientations leads to more latitude and a mismatch leads to less latitude. However, a match of low-low participative style predicting maximum latitude is
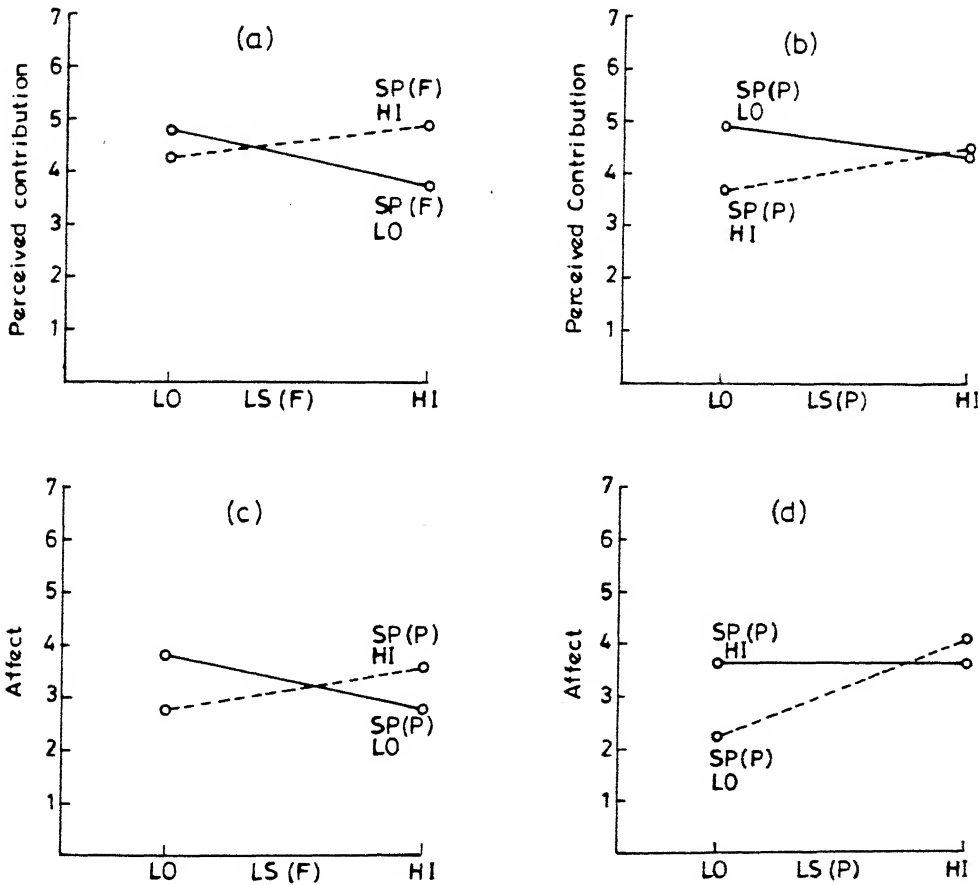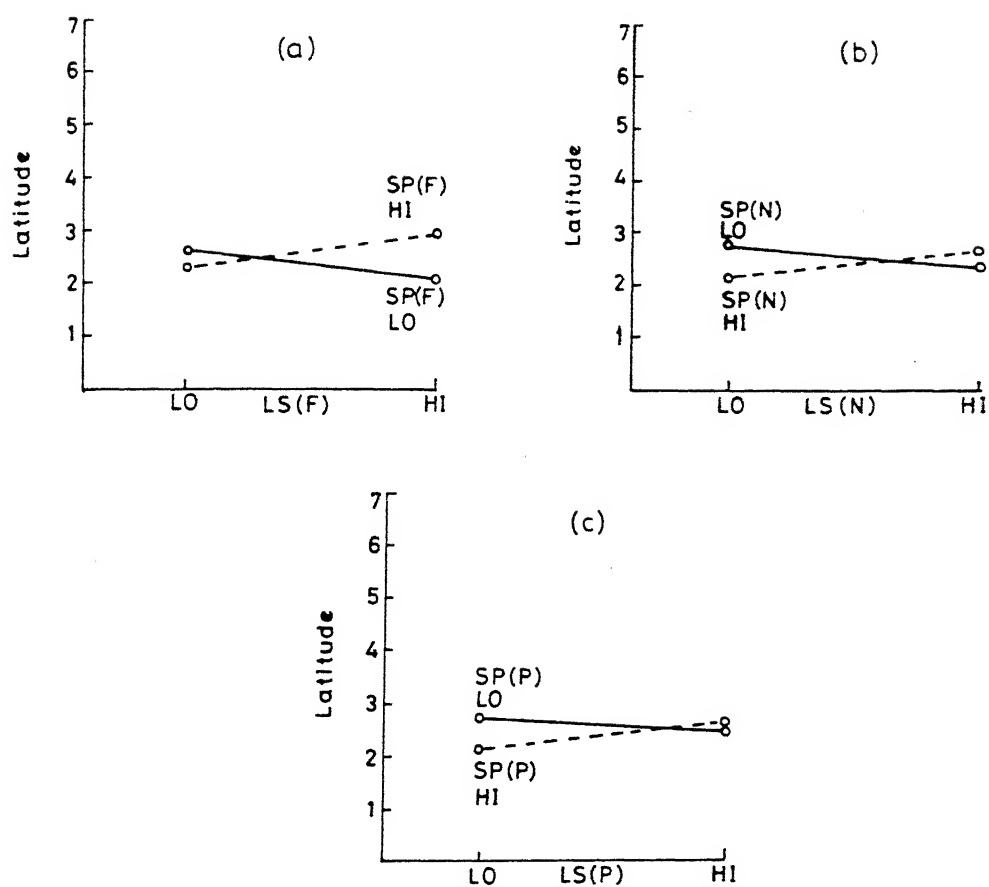
Figure 5·6. Mean latitude scores of the members as a function of leadership style (leaders') and style preference (members'). Abbreviations: LS=Leadership style; SP=Style preference; F=Authoritarian; P=Participative; N=Nurturant-task; HI= High; LO=Low.

beyond expectation because latitude given by the leader should be a direct function of participative style of the leader.

Comments

A general support for the hypotheses relating to leadership orientations shows that the behaviors or attitudes directly related to leadership situation are instrumental in determining the quality of exchange in a dyad.

We begin with the average leadership styles of the leader which are relatively stable orientations and which hold true across all subordinates. But the actual leader-member interactions in a work-group are affected as much by the members' orientations (preference) towards these leadership styles as by the leaders' own style. Thus, a study of the interaction of the two leads to a better understanding of the process.

The failure of authoritarian leaders in the average framework can be attributed to some other variables. First of all, not many subordinates are likely to prefer authoritarian style of leadership. It can be seen in Chapter 2 that the mean for authoritarian preference is lowest (2.32) as compared to nurturant task (3.33) and participative (3.35). Thus, the general average assumptions are not refuted totally but an interactive (leaders' styles and members' preference) hypothesis is a better predictor of the work-unit functioning.

Next, we focus on traditional person-environment interaction

for predicting of quality of exchange.

CLIMATE PERCEPTIONS

The Background

Before we proceed with our understanding of climate perceptions and it's role in determining the quality of exchange, let us briefly take the concept of person environment interaction. Schneider (1983, pp. 13-14) notes:

> People select themselves into and out of situations based on the general fit of themselves to the situation .... The interactionist position seems to best capture the world of work. This is so because of self-selection which mitigates against people encountering random situations.

Thus, the decision of the members whether to collaborate with their leader or not will follow the process of self selection.

The environment in organizations is conceptualized as climate. The personal orientations were discussed in the first part of this chapter. Now, we present our understanding of climate, for which we begin with Litwin and Stringer's (1968, p. 1) conceptualization:

> ... the term organizational climate refers to a set of measurable properties of the work environment, perceived directly or indirectly by the people who live and work in this environment and assumed to influence their motivation and behavior (emphases in original).

This rather uncomplicated definition does not reveal the controversies involved in the understanding of the concept. Lewin (1951) identified climate as a connecting link between the

person (P) and the environment (E). Hence, it can be thought of as a psychological representation of the objective environment. This puts the concept in a precarious position and raises a controversy—whether climate is the objective environment (E) or the individual's perception making it closer to the person (P) (Hellreigel & Slocum, 1974; James & Jones, 1974).

Jones & James (1979) resolve the controversy by further developing the earlier conceptualization made by Litwin and Stringer (1968). Climate, according to them, represents the organizational features and processes which are based on the perceptual descriptions of the organizational members.

For the present study, we are interested in psychological attributes of the climate (n Ach, n Pow, and n Aff). Hence, we focus on the individual level climate which James and Jones (1974) refer to as "psychological climate." According to Jones and James (1979, p. 205), psychological climate

> ... (a) refers to the individual's cognitively based description of the situation; (b) involves a psychological processing of specific perceptions into more abstract depictions of the psychologically meaningful influences in the situation; (c) tends to be most closely related to situational characteristics that have relatively direct and immediate ties to individual experience (emphases added).

Having thus defined psychological climate, the next step is to identify different dimensions or aspects of climate. As mentioned above, climate perceptions are more related to the proximal situational factors. Thus, empirically, an investigation of these variables should be useful in the conceptualization of climate. Earlier researches (e.g.,

Hellreigel & Slocum, 1974; Indik, 1968; James & Jones, 1974, 1976; Payne & Pugh, 1976; Schneider, 1975; Sells, 1963, 1968) have identified several dimensions like job characteristics (variety, challenge, etc.), social environment (friendliness of the work group), and leader behavior.

Although some of the earliest theorists (e.g., Blake & Mouton, 1964, Lewin, 1951; Likert, 1967; Litwin & Stringer, 1968; McGregor, 1960) recognized the importance of leadership in determining the climate of the organization, in recent times, "leadership has been all but ignored in this research" (Kozlowski & Doherty, 1989, p. 547). Lewin et al. (1939) were indeed the pioneers in this field. They manipulated leadership styles in simulated work-groups and observed the corresponding changes in the climate of the group (see Chapter 1). In fact, leadership style in their experiment was almost synonymous with the group climate. Litwin and Stringer (1968) created three simulated organizations with three leadership styles--formality, cooperation, and production. Over a period of time, these climates became differentiated depending upon the leader's style. As mentioned earlier, the most immediate phenomena influence the climate perceptions. Consequently, leadership too should be a strong influencing factor. Thus,

> the leadership behaviors of immediate supervisors are likely to be salient features and to be interpreted as representative of more molar organizational processes. Even features, events and processes occurring at higher levels are likely to be mediated by local leadership behaviors, given that an individual's immediate supervisor is the most salient, tangible representative of management actions, policies and procedures

(Kozlowski & Doherty, 1989, p. 547).

Litwin and Stringer (1968) also asserted that a particular need orientation of the organization too was a function of the leadership style. They (p. 101) add:

> ... the climates and the leadership styles designed to create them can be characterized as power-related (Organization A), affiliative (Organization B), and achieving (Organization C).

In essence, we can say that particular need orientations of the organization, for the members, are related to their leaders' behavior. Conversely, the need orientations of the organization, in general, can be equated with the immediate leader's style. Thus, the members' perceptions of organizational climate are their (the members') leaders' manifested style of working.

Some Conjectures

In the VDL framework, we again take the interactionists' perspective. The climate perceptions of the member are the leaders' working style. These climate orientations though are related to the leaders' own styles and orientations, they cannot be equated with them. Climate is the perception of the member and hence probably represents the _actual_ working condition for the members. After all, the leader too is a part of the organization and only partly reflects his or her own orientations.

Hence, these climate perceptions, in conjunction with the members' own attributes or orientations, towards work should

determine the members' perception of the quality of exchange but the same interaction for the leader (personal attributes and climate) is less relevant in determining his or her interaction with the subordinate. This leads as to the following hypotheses.

H9:   Leaders' quality of interaction is <u>not</u> a function of the interaction of their personal orientations and climate perceptions.

H10:   Members' perceived contribution is a function of the interaction of their personal orientations and climate perceptions.

H11:   Members' affect is a function of the interaction of their personal orientations and climate perceptions.

H12:   Other measures of quality of exchange (LMX, attention, and latitude) from the members' perspective are a function of their (members') personal orientations and climate perceptions.

Thus, essentially, climate is expected to play a significant role in determining the members' quality of exchange (or interaction) without affecting leaders' quality of exchange (or interaction). Further, since "people select themselves into and out of situations based on the general fit of themselves to the situation" (Schneider, 1983, p. 13), the interaction of personal orientations and climate is expected to be significant. However collaboration on unstructured tasks is voluntary on members' part and they have the option of not collaborating with the members. Therefore, the person-environment interaction in this case will not follow the usual rule where members are bound to work with and according to the leader (e.g., for contractual work).

Specifically the interactions of personal orientations and climate are expected to follow the same pattern as was hypothesized for the interaction of the personal orientations of leaders and members. Here, the climate replaces the personal orientations of the leader but the need-press explanation is as relevant, if not more, for personal orientations-climate interaction as for personal orientations-personal orientations interactions.

Results and Discussion

This set of hypotheses (H9 through H12) were statistically tested through hierarchical regression (see Chapter 3). The results are stated and discussed in the order of hypotheses. First, results for leaders' quality of interaction (H9) are discussed followed by members' perceived contribution (H10), members' affect (H11) and other quality of exchange measures for the members (H12) in the same order. In these sub-sections we shall only try to establish how each interaction can be understood in the need-press framework. Hence the discussion will be essentially at the atomic (dyadic) level. However, in the next section, a more global and comparative view will be presented.

Leaders' Quality of Interaction

The interaction effects of personal orientations and climate were tested for both the dimensions of quality of interaction--

Table 5.18

Hierarchical Regression Results--Leaders' Quality of Interaction as a Function of Interaction of their Personal Orientations and Climate Perceptions (Study 1)

PR CR	Perceived Contribution	Affect
LA x CA	(.06, .00)	(-.10, .01)
LA x CI	(.01, .00)	(-.15, .03)
LA x CP	(.03, .00)	(.15, .01)
LI x CA	(-.03, .00)	(-.13, .02)
LI x CI	(.05, .00)	(-.14, .02)
LI x CP	(.03, .00)	(.07, .00)
LP x CA	(-.03, .00)	(-.07, .00)
LP x CI	(-.05, .00)	(-.15, .02)
LP x CP	(-.01, .00)	(.06, .00)

Note.   N = 152; LA, LI, and LP are, respectively, leaders' Achievement, Independence, and Power Orientations; CA, CI, and CP are, respectively, leaders' climate perception for Achievement, Independence, and Power Orientations; PR = Predictor; CR = Criterion; Figures in parantheses are beta coefficients and R square change, respectively.

perceived contribution and affect (only in Study 1). The beta coefficients for both are given in Table 5.18. The mean scores for perceived contribution and affect are given in Table 5.19 and Table 5.20, respectively. Beta coefficients show that none of the interactions is significant either for perceived contribution or

Table 5.19

Mean Scores--Leaders' Perceived Contribution as a Function of Leaders' Personal Orientations and Climate Perceptions (Study 1)

LC		LC(P)		LC(A)		LC(I)	
L		LOW	HIGH	LOW	HIGH	LOW	HIGH
L(P)	LOW	5.10	4.94	4.10	6.05	4.00	6.60
	HIGH	5.20	4.64	4.68	5.00	5.30	4.97
L(A)	LOW	5.10	4.68	4.90	+	4.80	5.60
	HIGH	5.29*	5.18	+	5.40	5.00	5.12
L(I)	LOW	5.50	5.15	5.00*	5.05	6.30	5.13
	HIGH	5.30	5.38	5.40	5.90	5.25	5.53

Note.   N = 152; L = Leaders' Personal Orientations; LC = Leaders' Climate Perceptions; P = Power; A = Achievement; I = Independence; * Predicted means (Winer, 1971); + Zero cells.

for affect. The results provide full support to our hypothesis (H9). Since the leader is evaluating his or her interaction with the individual members, it is obvious that only those variables related to the self and the other (i.e., the member) are relevant. Climate obviously is not influenced by the member at all; hence, it is not useful in determining the dyadic quality of interaction.

Table 5.20

Mean Scores--Leaders' Affect as a Function of Leaders' Personal Orientations and Climate Perceptions (Study 1)

LC		LC(P)		LC(A)		(LC(I)	
L		LOW	HIGH	LOW	HIGH	LOW	HIGH
L(P)	LOW	2.90	2.70	2.33	4.15	2.27	4.20
	HIGH	4.00	3.14	3.13	4.60	4.60	3.37
L(A)	LOW	2.90	2.55	2.63	+	2.65	4.40
	HIGH	3.44*	3.54	+	3.00	4.93	3.22
L(I)	LOW	4.50	2.42	3.73*	3.30	2.40	3.63
	HIGH	4.60	3.67	4.40	4.20	4.02	3.47

Note.   Same as Table 5.19.

Members' Perceived Contribution

The next hypothesis (H10) was tested in Study 1 and then retested in Study 2. First, we will present the results of Study 1 and then of Study 2.

Study 1 Results

The beta coefficients and R^2 change are presented in Table 5.21. As is evident, five interactions significantly determine perceived contribution; of which four are highly significant ($p < .01$). The mean scores of perceived contribution as a function of this interaction are shown in Table 5.22.

Table 5.21

Hierarchical Regression Results—Members' Quality of Exchange as a Function of the Interaction of their Personal Orientations and Climate Perceptions (Study 1)

PR CR	Perceived Contribution	Affect	LMX
MA x CA	$(.22^a, .05)$	$(.21^a, .04)$	$(.22, .05)$
MA x CI	$(.01, .00)$	$(.08, .01)$	$(-.02, .00)$
MA x CP	$(.17^a, .03)$	$(.16^b, .03)$	$(.16^b, .03)$
MI x CA	$(.22^a, .04)$	$(.11, .01)$	$(.20^b, .04)$
MI x CI	$(-.10, .01)$	$(.16^b, .02)$	$(-.06, .00)$
MI x CP	$(.17^b, .03)$	$(.07, .00)$	$(.17^b, .03)$
MP x CA	$(.25^a, .06)$	$(.22^a, .05)$	$(.21, .04)$
MP x CI	$(-.04, .00)$	$(-.11, .01)$	$(-.06, .00)$
MP x CP	$(.11, .01)$	$(.12, .01)$	$(.19^b, .03)$

Note. $N = 152$; a $p < .01$; b $p < .05$; MA, MI, and MP are, respectively, members' Achievement, Independence, and Power Orientations; CA, CI, and CP are, respectively, members' climate perception for Achievement, Independence, and Power Orientations; PR = Predictor; CR = Criterion; Figures in parantheses are beta coefficients and R square change, respectively.

First of all, the achievement of both the members' and the climate interact significantly. Perceived contribution is maximum for members who are high on n Ach and are working in a high achievement oriented climate; it (perceived contribution)

Table 5.22

Mean Scores--Members' Perceived Contribution as a Function of Members' Personal Orientations and Climate Perceptions (Study 1)

MC		MC(P)		MC(A)		MC(I)	
M		LOW	HIGH	LOW	HIGH	LOW	HIGH
M(P)	LOW	6.30	4.74	3.89*	4.91	4.55	6.10
	HIGH	6.07	5.55	4.23	6.63	4.40	4.88
M(A)	LOW	5.76	5.37	5.49	4.50	5.04	6.20
	HIGH	5.80	3.40	4.20	5.86	4.67	5.47
M(I)	LOW	5.22	5.73	4.87	5.20	3.90	6.00
	HIGH	5.26	4.12	3.72	6.35	4.69	5.34

Note.   N = 152; M = Members' Personal Orientations; MC = Members' Climate Perceptions; A = Achievement; I = Independence; P = Power; * Predicted mean (Winer 1971).

is minimum when the member is high on achievement orientation but the climate is low on the same need (Figure 5.7a). Clearly, a match between the predictors predicts high perceived contribution and a mismatch predicts low perceived contribution. Obviously, a high achievement oriented climate facilitates the n Ach of the members and a high n Ach member finds the climate conducive for work and, hence, assigns a high rating to perceived contribution.

Figure 5.7. Mean perceived contribution scores of the members (Study 1) as a function of personal orientation and climate.
Abbreviations: M = Members' Personal Orientations; C=Climate; A=Achievement; I=Independence; P=Power; HI=High; LO=Low.

Table 5.23

Mean Scores--Members' Affect as a Function of Members' Personal Orientations and Climate Perceptions (Study 1)

MC		MC(P)		MC(A)		MC(I)	
	M	LOW	HIGH	LOW	HIGH	LOW	HIGH
M(P)	LOW	4.00	1.94	1.48*	2.34	2.05	3.75
	HIGH	3.67	3.67	2.30	4.83	1.70	3.42
M(A)	LOW	3.52	1.28	4.17	1.40	3.24	2.70
	HIGH	4.33	4.23	2.70	4.43	3.07	4.09
M(I)	LOW	3.60	2.52	2.67	3.05	3.03	3.31
	HIGH	3.77	3.05	2.75	4.20	2.65	3.72

Note. Same as Table 5.22.

low $\underline{n}$ Ach climate to be less efficient. Besides, a low $\underline{n}$ Ach climate does not provide enough environmental presses for the members' needs to be satisfied and the member refrains from collaborating on unstructured tasks.

Next, the achievement orientation of the member and power orientation of the climate also show a significant interaction effect. Perceived contribution is maximum when the member is high on achievement orientation and the climate is low on power. The same contribution is minimum when the member is high on achievement and the climate is high on power (Figure 5.7b). A

Table 5.24

Mean Scores--Members' LMX as a Function of Members' Personal
Orientations and Climate Perceptions (Study 1)

MC		MC(P)		MC(A)		MC(I)	
M		LOW	HIGH	LOW	HIGH	LOW	HIGH
M(P)	LOW	3.20	2.97	2.29*	2.71	2.15	3.25
	HIGH	3.60	2.43	2.40	3.37	2.50	2.86
M(A)	LOW	3.12	3.07	3.23	2.07	2.64	3.40
	HIGH	3.17	1.88	2.95	3.37	2.93	3.27
M(I)	LOW	2.94	2.92	2.67	2.80	2.35	3.04
	HIGH	3.13	2.28	2.27	3.52	2.57	3.14

Note. Same as Table 5.22.

high power oriented climate excessively controls and guides the
members' activities leaving little scope for the members to
satisfy their achievement orientation. On the other hand, a low
power oriented climate, by not doing so, leaves enough scope for
the member to satisfy his or her achievement needs. Thus, in the
former situation, the member avoids collaborating whereas in the
latter situation he or she collaborates.

Members' power orientation and achievement orientation of
the climate also yield significant interaction results. A member
high on power orientation shows maximum perceived contribution in

Table 5.24

Mean Scores--Members' LMX as a Function of Members' Personal Orientations and Climate Perceptions (Study 1)

MC		MC(P)		MC(A)		MC(I)	
M		LOW	HIGH	LOW	HIGH	LOW	HIGH
M(P)	LOW	3.20	2.97	2.29*	2.71	2.15	3.25
	HIGH	3.60	2.43	2.40	3.37	2.50	2.86
M(A)	LOW	3.12	3.07	3.23	2.07	2.64	3.40
	HIGH	3.17	1.88	2.95	3.37	2.93	3.27
M(I)	LOW	2.94	2.92	2.67	2.80	2.35	3.04
	HIGH	3.13	2.28	2.27	3.52	2.57	3.14

Note.   Same as Table 5.22.

high power oriented climate excessively controls and guides the members' activities leaving little scope for the members to satisfy their achievement orientation. On the other hand, a low power oriented climate, by not doing so, leaves enough scope for the member to satisfy his or her achievement needs. Thus, in the former situation, the member avoids collaborating whereas in the latter situation he or she collaborates.

Members' power orientation and achievement orientation of the climate also yield significant interaction results. A member high on power orientation shows maximum perceived contribution in

a high achievement oriented climate, but the contribution (perceived) is minimum when a low power oriented member works in a low achievement oriented climate (Figure 5.7c). This finding is rather difficult to explain. It is hard to explain how achievement orientation of the climate facilitates the power orientation of the members.

Next, independence orientation of the members and power orientation of the climate interact significantly to predict members' perceived contribution. It can be seen that the perceived contribution is maximum for a low independence oriented member who is working in a high power oriented climate, and it (perceived contribution) is minimum when the member is high on independence and climate too is high on power (Figure 5.7d). Collaboration in this case seems to be following a complementarity rule. Very clearly, a high power oriented climate guides and controls the activities of the members, so that the members do not have to do anything independently. Thus, such a climate is a boon for all those members who avoid independence (low on independence) and they work best (and hence collaborate) in such a climate. The same climate (i.e., low independence oriented) will clash with the members' needs if they (the members) are high on independence. In such a situation members will limit their contribution to contractual tasks only.

Finally, independence orientation of the members and achievement orientation of the climate also provided significant interaction results. Perceived contribution is maximum when a

high independence oriented member works in a high achievement oriented climate, but it is the lowest when the same (high independence oriented) member works in a low achievement oriented climate (Figure 5.7e). Achievement oriented climate probably demands results and does not hamper the individual's independence much. Hence a high independence oriented member works well in such a climate, collaborates more with the leader, and has more perceived contribution. It is hard to explain, how a low achievement oriented climate restricts members' independence.

Study 2 Results

Three interaction effects significantly predicted members' perceived contribution in this study. The beta coefficients and R square change can be looked up in Table 5.25 and the mean scores of perceived contribution for the interaction terms are provided in Table 5.26. Of the three interactions, two were the same as in Study 1.

First interaction that was clearly repeated in this study was the one between the achievement orientations of the members and the climate. It can be seen (Figure 5.8a) that a high-high match predicts maximum perceived contribution, whereas for a high n Ach member working in a low achievement oriented climate (a mismatch), the perceived contribution is minimum. This result replicates that of Study 1 and provides further strength to this particular interaction.

Next, the independence orientation of the members and power
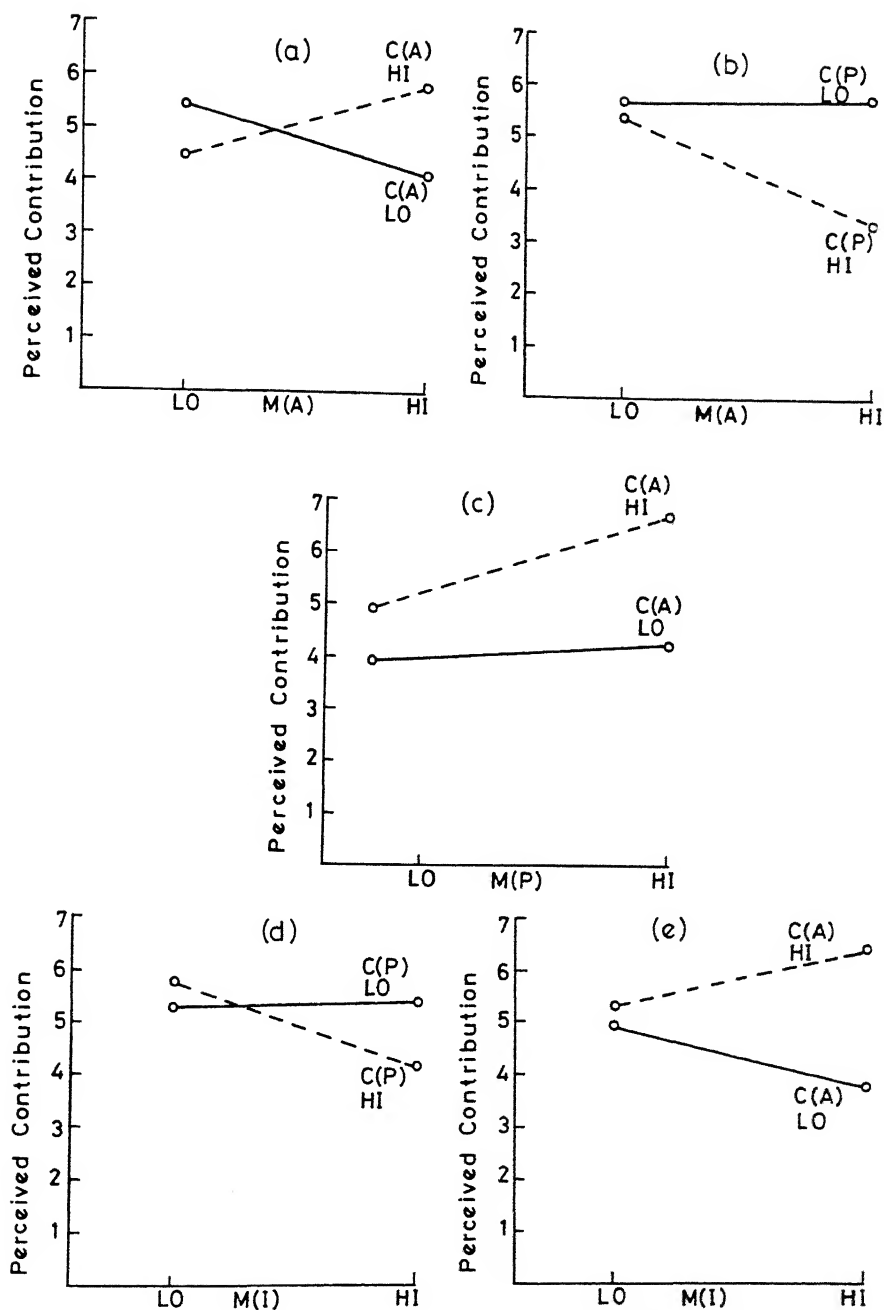
Figure 5·8. Mean perceived contribution scores of the members (Study 2) as a function of personal orientations and climate. Abbreviations: M= Members' Personal Attributes; C= Climate; A= Achievement; I = Independence; P= Power; HI= High; LO= Low.

Table 5.25

Hierachical Regression Results--Members' Quality of Exchange as a
Function of the Interaction of their Personal Orientations and
Climate Perceptions (Study 2)

PR CR	Perceived Contribution	Affect	Attention	Latitude
MA x CA	$(-.23^b, .05)$	$(-.21^b, .04)$	$(-.26^a, .06)$	$(-.23^b, .04)$
MA x CI	$(-.23^b, .05)$	$(-.25^a, .06)$	$(.31^a, .09)$	$(-.26^a, .06)$
MA x CP	$(.10, .01)$	$(.06, .00)$	$(.11, .01)$	$(.09, .00)$
MP x CA	$(-.16, .02)$	$(-.14, .02)$	$(-.19^b, .03)$	$(-.24^b, .05)$
MP x CI	$(.00, .00)$	$(-.05, .00)$	$(-.11, .01)$	$(-.21^b, .04)$
MP x CP	$(-.05, .001)$	$(-.19^b, .03)$	$(-.12, .01)$	$(-.19, .03)$
MI x CA	$(.03, .00)$	$(-.06, .00)$	$(-.06, .00)$	$(.00, .00)$
MI x CI	$(.12, .01)$	$(.02, .00)$	$(.07, .00)$	$(.15, .02)$
MI x CP	$(-.21^b, .04)$	$(-.16, .03)$	$(-.17, .03)$	$(-.27^a, .07)$

Note. $\underline{N}$ = 96; a $\underline{p}$ < .01; b $\underline{p}$ < .05; MA, MP, and MI are
respectively, members' Achievement, Power and
Independence Orientations; CA, CP, and CI are
respectively, members' perception of climate for
Achievement, Power, and Independence Orientations; PR =
Predictor, CR = Criterion; Figures in parantheses are
beta coefficients and R square change respectively.

orientation of the climate (as in Study 1) yield a significant
interaction. That is, maximum perceived contribution is
predicted when a member high on independence orientation works in
a climate low on power orientation. But, perceived contribution

Table 5.26

Mean Scores--Members' Perceived Contribution as a Function of Members' Personal Orientations and Climate Perceptions (Study 2)

MC		MC(P)		MC(A)		MC(I)	
M		LOW	HIGH	LOW	HIGH	LOW	HIGH
M(P)	LOW	5.40	2.60	4.21*	5.71	4.50	5.47
	HIGH	3.40	2.70	2.85	4.50	2.90	3.96
M(A)	LOW	3.50	2.13	4.50	4.87	2.70	2.80
	HIGH	3.40	4.53	2.73	6.40	3.83*	4.45
M(I)	LOW	3.93	4.60	3.47	5.25	3.07	4.55
	HIGH	5.70	2.65	2.80	6.00	2.63	4.92

Note.   N = 96; For abbreviations, see Table 5.22.

is minimum when both are high on their respective orientations (Figure 5.8c). This result too is an exact replication of Study 1, thereby strengthening the importance of this interaction.

Finally, a third interaction which is new to this study is of interest. Perceived contribution is significantly predicted by the interaction of member's achievement orientation and the climate's independence orientation. Maximum perceived contribution is predicted when both these orientations are high, and minimum perceived contribution results when both are low (Figure 5.8b). A climate high on independence orientation gives the members enough freedom to set their goals and to choose their

work pattern which helps a high n̲ Ach person. Thus, a high-high cell predicting high contribution seems justified.

In general, hypothesis 10 (H10) finds substantial support in both the studies.

Members' Affect

Like perceived contribution, hypotheses regarding members' affect were also tested both in Study 1 and Study 2. Interaction results are presented below.

Study 1 Results

The results revealed four significant interactions. The beta coefficients and R̲ square change of the same are depicted in Table 5.18. The mean scores are given in Table 5.22.

Firstly, the members' and the climates' achievement orientations interact significantly to predict the members' affect. Affect is highest when both these orientations are high and is lowest when the climate is high on achievement orientation and the member himself or herself is low on achievement orientation (Figure 5.9a). It is obvious that the member will have a liking for a climate that facilitates his or her personal dispositions. Thus, an achievement oriented member shows a high liking (affect) when the climate too is high on achievement orientation. In the same vein, a member low on achievement orientation is very likely to find a high achievement oriented climate pushy. Consequently, the member shows low
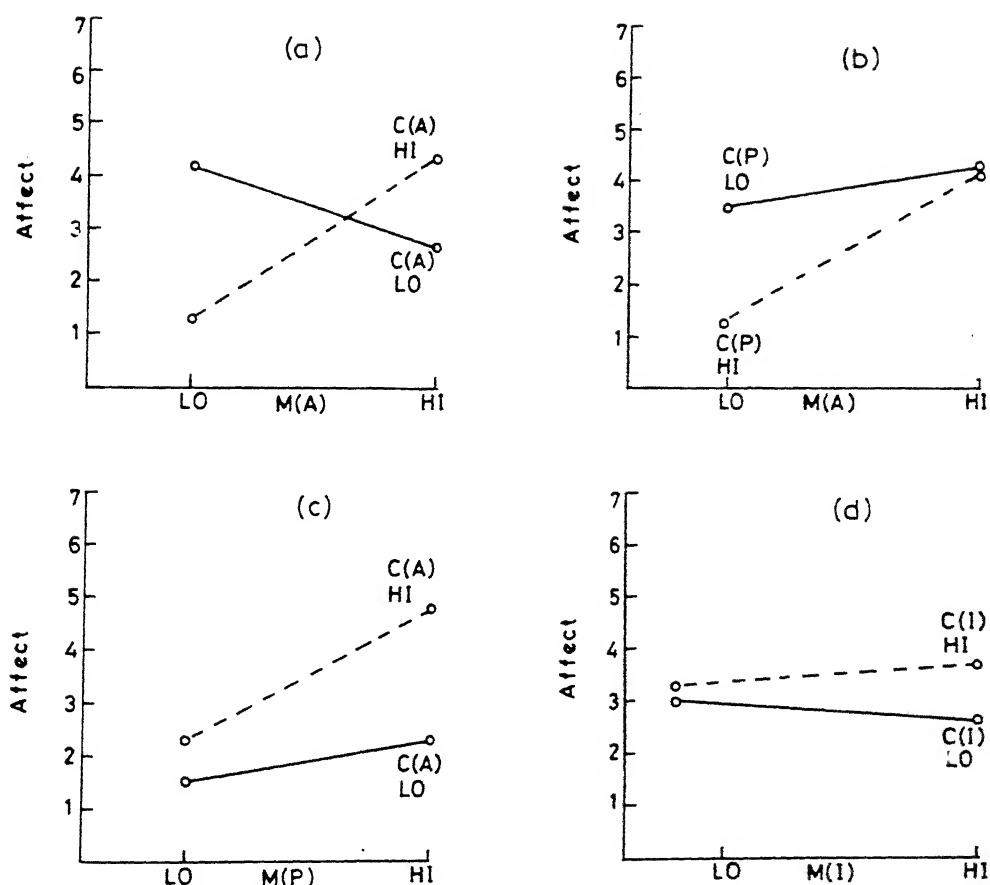
Figure 5·9. Mean affect scores of the members(Study 1) as a function of personal orientations and climate. Abbreviations: M = Members' personal attributes; C = Climate; A = Achievement; I = Independence; P = Power; HI = High; LO = Low.

affect.

Secondly, the achievement orientation of the member and power orientation of the climate show significant interaction results. It can be seen (Figure 5.9b) that affect is maximum when the member is high on achievement orientation and the climate is low on power. Affect is minimum when member is low on achievement orientation but the climate is high on power. This shows that affect is a direct function of his or her own achievement orientation and it is an inverse function of the power orientation of the climate, when the two orientations are taken together. A climate, low on power orientation, gives the members the power (freedom) to satisfy his or her achievement needs. Hence, the member shows a high affect. But when the member is low on achievement orientation but the climate controls the activities of the members, members find the climate pushy and domineering, and shows a low affect.

Thirdly, the achievement orientation of the climate and power orientation of the self (members) interact significantly to determine affect. Affect is highest when both these orientations are high and is lowest when both these orientations are low (Figure 5.9c)—a finding once again difficult to explain.

Finally, the independence orientations of both the members and the climate interact significantly. Affect is highest when both these orientations are high and is lowest when the member is high and the climate is low on independence (Figure 5.9d). Clearly, affect follows the similarity rule. A climate high on

independence provides the necessary press for a member to satisfy his or her independence needs. The affect obviously is low when a member high on independence orientation works in a climate that gives less autonomy.

Study 2 Results

Three interactions significantly influenced the affect of the members. Beta coefficients and R square change are given in Table 5.25, and the means of interaction terms are given in Table 5.27. Of the three significant interactions, only one was repeated from Study 1.

Table 5.27

Mean Scores--Members' Affect as a Function of Members' Personal Orientations and Climate Perceptions (Study 2)

MC		MC(P)		MC(A)		MC(I)	
M		LOW	HIGH	LOW	HIGH	LOW	HIGH
M(P)	LOW	2.40	1.85	3.13*	4.44	1.90	4.25
	HIGH	3.40	1.20	1.85	3.20	1.83	2.86
M(A)	LOW	3.10	3.87	3.20	1.33	1.70	1.40
	HIGH	2.40	3.09	3.60	4.00	2.93*	3.40
M(I)	LOW	3.00	3.70	1.87	4.35	1.60	3.85
	HIGH	3.70	2.35	2.35	4.17	2.03	3.52

Note. N = 96; For abbreviations, see Table 5.22.

Just as in Study 1, the achievement orientations of the members themselves and the climate show a significant interaction. It can be seen that affect is highest when both these orientations are high but it is lowest when the member himself or herself is low on achievement but the climate is high on achievement orientation (Figure 5.10a). This result is identical with that of Study 1.

The next significant interaction is between the achievement orientation of the members and the independence orientation of the climate. Affect is highest when both are high and it is lowest when the member is low on achievement orientation but the climate is high on independence (Figure 5.10b). Clearly, a member with high $\underline{n}$ Ach prefers to have autonomy (independence) on jobs and shows more affect for the leader in such a case. It is hard to explain the results for low affect. Probably, a member who is low on achievement orientation looks for more order and control in the climate. However if the climate lacks such order and control, affect becomes low.

Finally, the power orientations of the members and the climate show significant interaction results. When the member is high on power and the climate is low on power, the affect is maximum. Bt the affect is minimum when both are high on power orientation (Figure 5.10c). Clearly, affect follows complementarity rule. A member, who likes to dominate gets enough opportunity to do so when the climate does not control and guide his or her activities. The member in this case shows
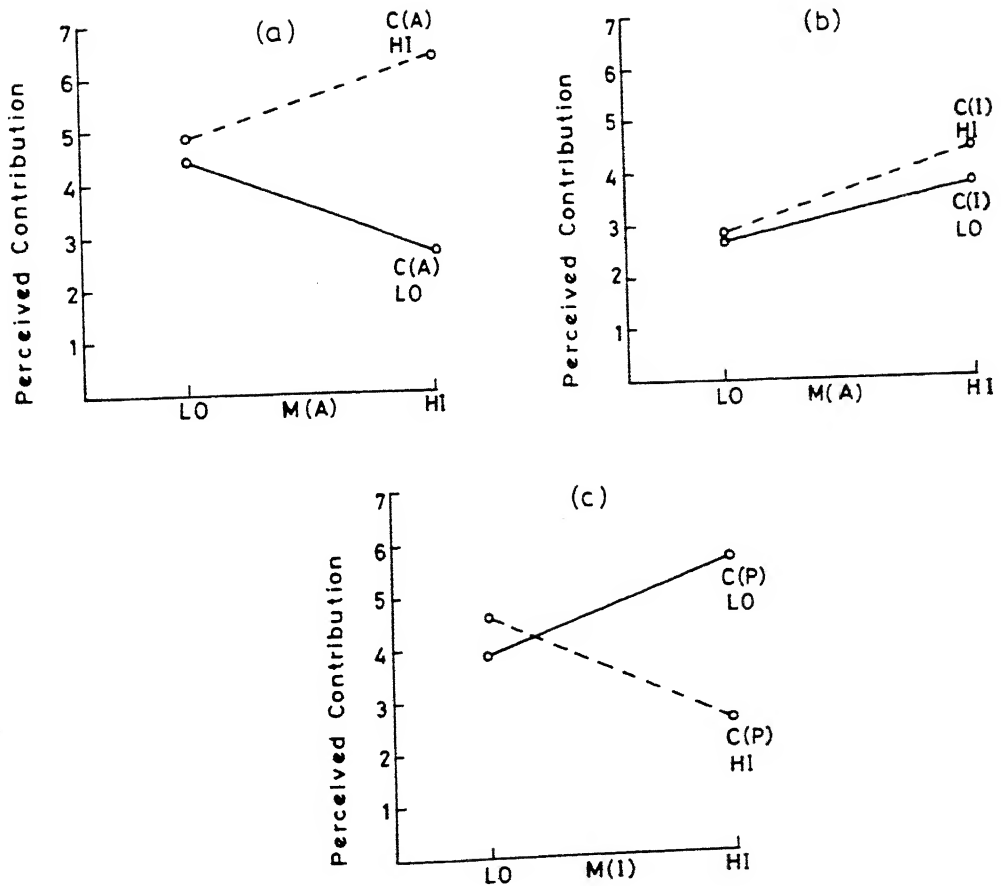
Figure 5·10. Mean affect scores of the members (Study 2) as a function of personal orientations and climate. Abbreviations: M=Members' Personal Attributes; C=Climate; A=Achievement; I=Independence; P=Power; HI=High; LO=Low.

maximum affect. When the same member works in a high power oriented climate, the collaboration is minimum and so is affect. The Hypothesis 11 (H11), too, finds substantial support in both the studies.

Other Measures of Exchange

As was mentioned in Chapter 4, other measures of leader-member exchange were included in the studies. The interaction of personal orientations and climate as a determinant of these measures, too, was tested. LMX (Leader-Member Exchange), Attention, and Latitude were the three additional measures included--the first was included in Study 1 and the last two were included in Study 2. All three represented members' perspective only.

Members' LMX

Four interactions significantly predicted LMX. The beta coefficients and R square change are given in Table 5.21 and the means are given in Table 5.24.

Members' achievement orientation and power orientation of the climate interact significantly to predict LMX. LMX is maximum when members' achievement orientation is high and the climate is low on power orientation, whereas LMX is minimum when both are high (Figure 5.11a). As mentioned before, a climate low on power does not interfere with the activities of the members. For a high n Ach member, such a climate is a boon; hence, it leads to more collaboration and high LMX. But when the climate
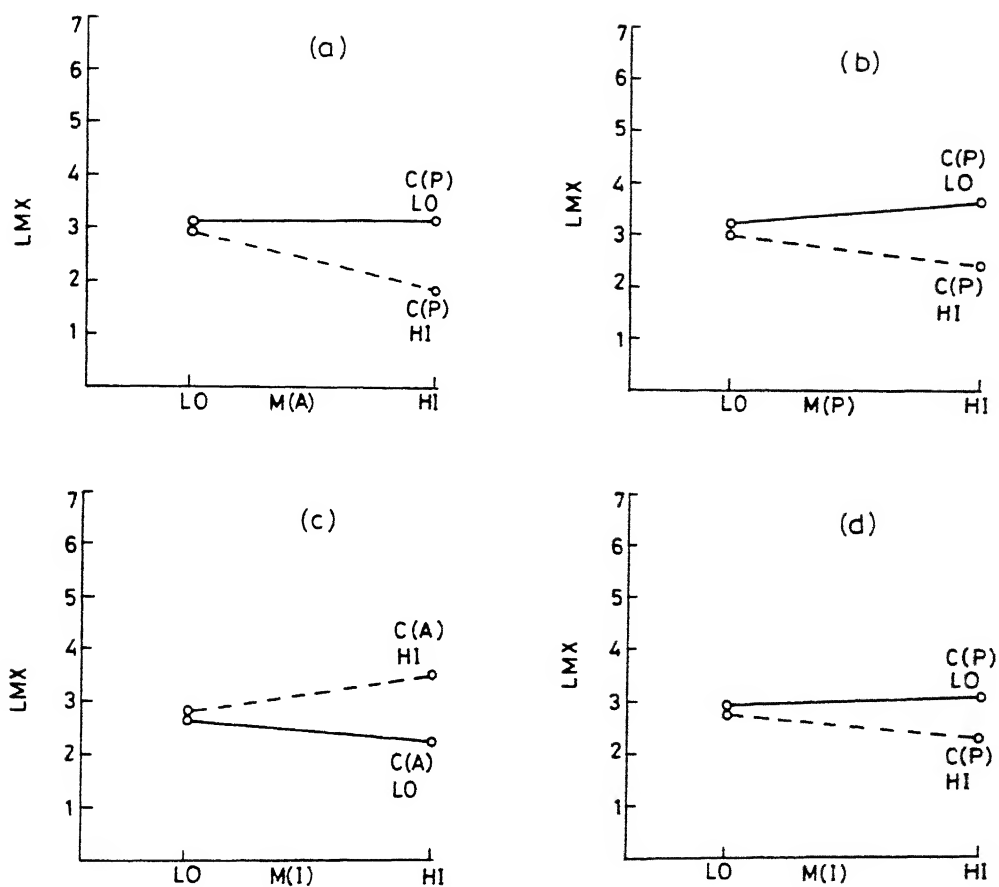
Figure 5·11. Mean LMX scores of the members (Study 1) as a function of members' personal orientations and climate. Abbreviations : C = Climate;

M = Members' personal attributes; A = Achievement; I = Independence;

P = Power; HI = High; LO = Low.

controls and directs (high n power) the activities of the members, the members do not get enough opportunities to satisfy their achievement needs. Consequently, LMX is minimal.

Secondly, the power orientations of both--the members and the climate--also show a significant interaction. LMX is maximum when a member is high on need for power and works in a climate which is low on need for power. LMX is minimum when the same member (high n Pow) works in a climate that too is power oriented (Figure 5.11b). LMX clearly follows the complementarity rule, as mentioned before.

Climate seems to interact significantly with both independence and achievement orientations of the members in predicting LXM. LMX is maximum when both are high and it is minimum when the member is high on independence but the climate is low on achievement (Figure 5.11c). The result eludes explanation. The results will be logical if we make an assumption that an achievement oriented climate gives enough autonomy to the members--a pure conjecture.

Finally, the independence orientation of the members and power orientation of the climate interact significantly to predict LMX. LMX is maximum when members' independence orientation is high and the climate is low on power, whereas LMX is minimum when both are high (Figure 5.11d). Clearly, collaboration is based on complementarity rule.

Members' Attention

Three interactions significantly predicted members' attention. Beta coefficients and R square change are given in Table 5.25 and mean scores are given in Table 5.28.

Table 5.28

Mean Scores--Members' Attention as a Function of Members' Personal Orientations and Climate Perceptions (Study 2)

MC		MC(P)		MC(A)		MC(I)	
M		LOW	HIGH	LOW	HIGH	LOW	HIGH
M(P)	LOW	3.80	1.60	1.95	4.31	2.50	4.20
	HIGH	2.60	1.75	2.61	2.70	2.10	2.88
M(A)	LOW	2.90	1.73	2.73	2.70	2.23	2.20
	HIGH	2.60	2.80	1.60	4.20	1.57	2.65
M(I)	LOW	3.13	3.00	1.60	4.05	1.53	3.40
	HIGH	4.60	1.95	2.15	4.40	1.90	4.12

Note. N = 96; For abbreviations, see Table 5.22.

The achievement orientations of the members and the climate show significant interaction. Attention is maximum when both are high and it is minimum when the member is high on achievement orientation and the climate is low on it (Figure 5.12a). When the climate nurtures the members' need (achievement), it
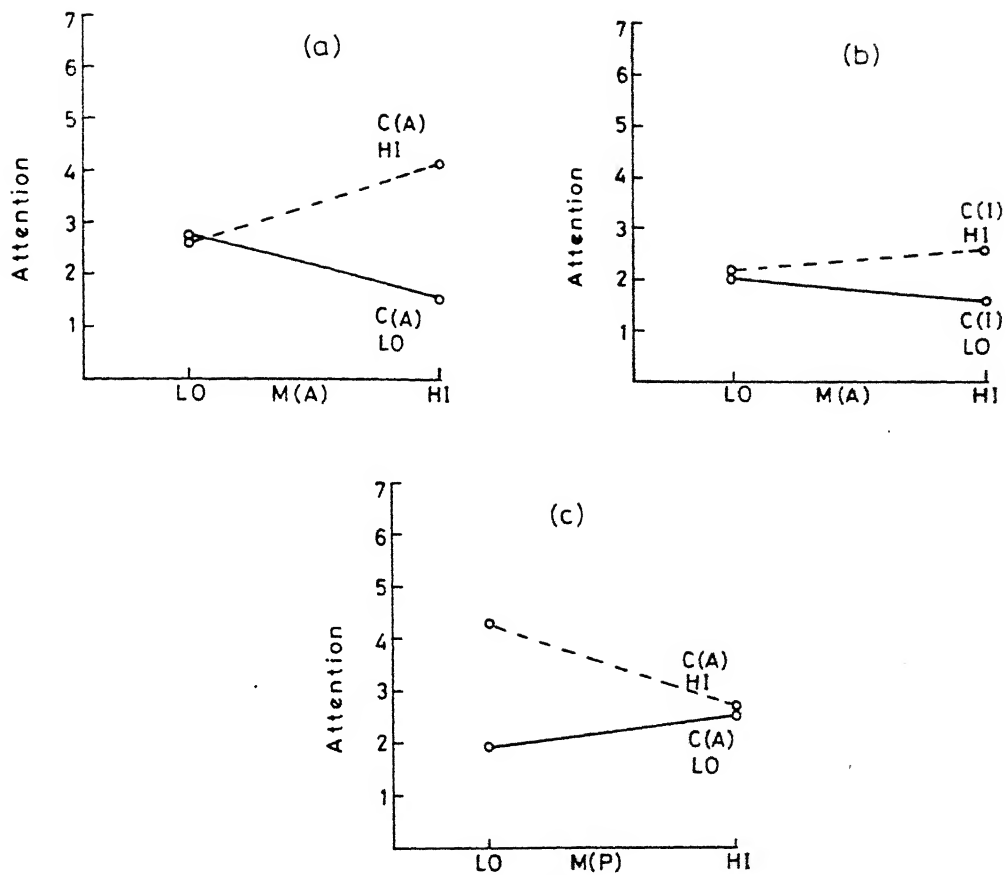
Figure 5·12. Mean attention scores of the members (Study 2) as a function of members' personal orientations and climate. Abbreviations: M = Members' personal attributes; C = Climate; A = Achievement; I = Independence; P = Power; HI = High; LO = Low.

(climate) is perceived as paying attention. But when the climate itself is low on n Ach but the member has high n Ach, clearly, the atmosphere is not conducive and it results in less attention.

The achievement orientation of the members and independence orientation of the climate interacted significantly to predict members' attention. Attention is maximum when both these orientations are high and it is minimum when the member is high on achievement orientation but the climate is low on independence orientation (Figure 5.12b). Evidently, independence given by the climate helps the members to satisfy their achievement needs. Thus, a person high on n Ach working in an independence oriented climate perceives more attention.

Finally, the power orientation of the members and achievement orientation of the climate show a significant interaction. Attention is maximum when the member is low on power and the climate is high on achievement orientation. Attention is minimum when both these orientations are low (Figure 5.12c).

Members' Latitude

Five interactions significantly predicted members' perception of latitude. Both beta coefficients and R square change are provided in Table 5.25 and the means in Table 5.29.

The achievement orientations of both the members and the climate show a significant interaction effect. Latitude was maximum when the members' and the climate's achievement

orientations were high and it (latitude) was minimum when the member had a high n̲ Ach and the climate showed low n̲ Ach (Figure 5.13a). The explanation for this interaction is given in the previous sections.

Table 5.29

Mean Scores—Members' Latitude as a Function of Members' Personal Orientations and Climate Perceptions (Study 2)

MC		MC(P)		MC(A)		MC(I)	
M		LOW	HIGH	LOW	HIGH	LOW	HIGH
M(P)	LOW	2.70	1.60	1.90	3.42	1.90	2.60
	HIGH	2.20	1.70	2.34	2.70	1.60	3.27
M(A)	LOW	2.50	1.73	2.60	2.70	2.14	2.20
	HIGH	2.20	2.67	1.80	3.60	1.77	2.55
M(I)	LOW	2.33	2.70	1.87	3.25	1.73	2.85
	HIGH	3.50	1.55	3.75	3.40	1.57	3.36

Note. N̲ = 96; For abbreviations, see Table 5.22.

The achievement orientation of the members also combines with the independence orientation of the climate to predict latitude. Latitude is maximum when a member is high on achievement need and works in an independence oriented climate, but it is minimum when the same member (high n̲ Ach) works in a climate which is low on independence orientation (Figure 5.13b).
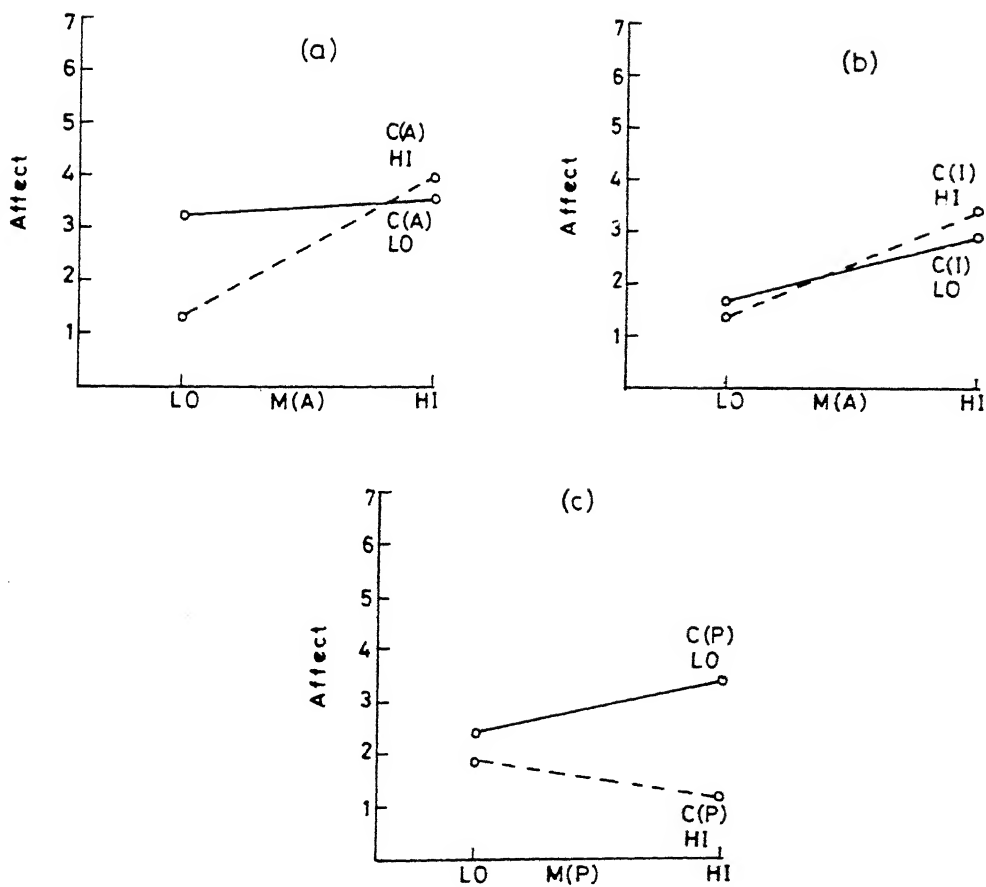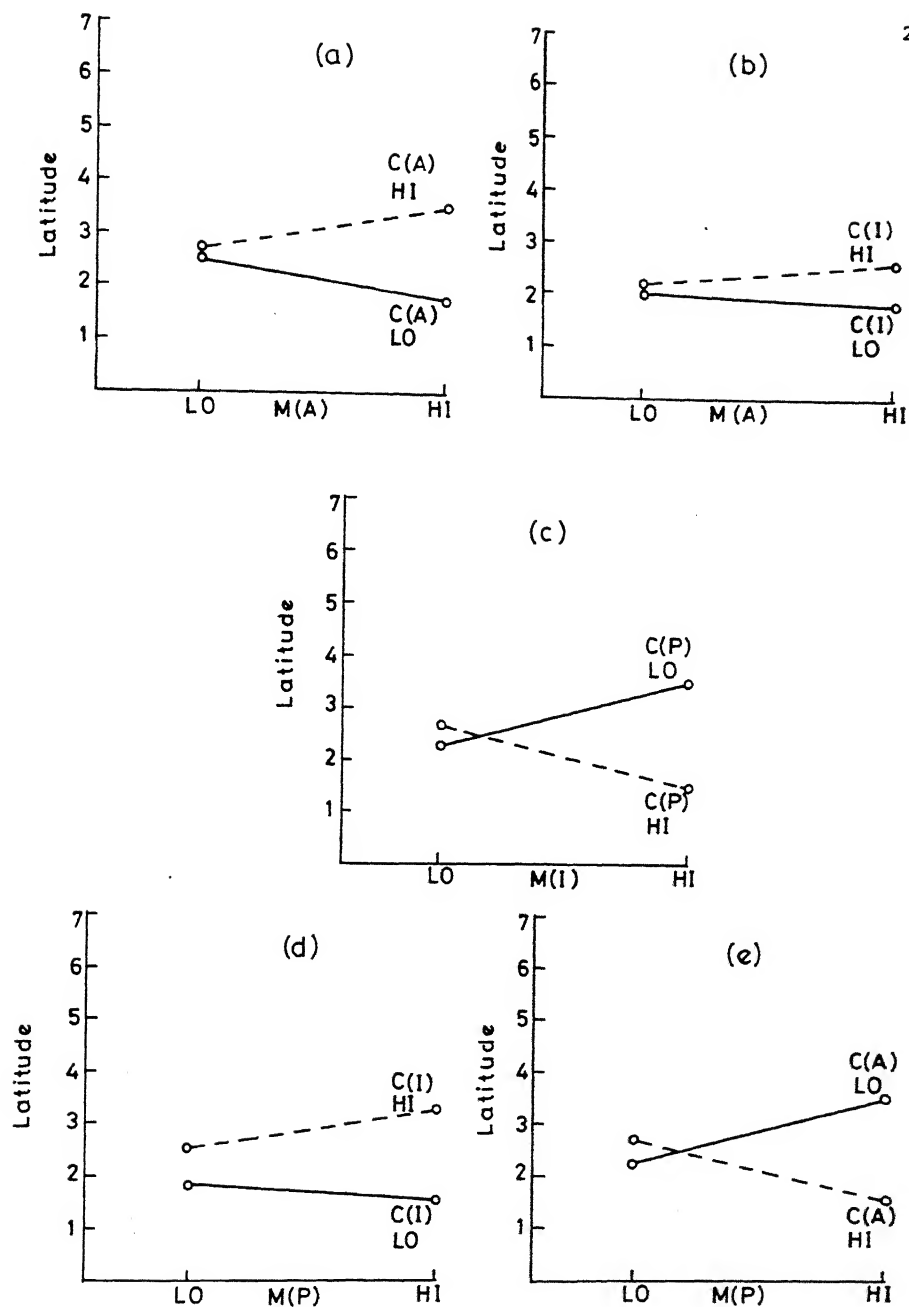
Figure 5.13. Mean latitude scores of the members (Study 2) as a function of members' personal orientations and climate. Abbreviations: M=Members' Personal Attributes; C=Climate ; A=Achievement; I=Independence; P=Power; H=High; LO=Low.

Clearly, independence orientation of the climate has direct implications for latitude. This effect gets more pronounced when combined with the achievement needs of the members.

The independence orientation of the members is also found to combine with power orientation of the climate. Latitude is perceived to be maximum when the member is high on independence and the climate is low on power, and it (latitude) is maximum when the member has high independence needs but the climate, too, is high on power orientation (Figure 5.13c). Obviously, power orientation of the climate thwarts the independence of the members--hence, these results.

The power orientation of the members interacts with the independence orientation of the climate in predicting latitude. Latitude is maximum when the member is high on power need and the climate is high on independence orientation, but the same latitude drops to a minimum when the member is high on power and the climate too is high on independence (Figure 5.13d). Evidently, the independence orientation of the climate helps the members to satisfy their power needs. High independence of the climate facilitates members' need for power but low independence hinders the satisfaction of power needs of the members.

Finally, the achievement orientation of the climate and power orientation of the members show a significant interaction. Latitude is maximum when the member is high on need for power and works in a low n Ach climate. On the other hand, the latitude is minimum when the same member works in a high independence

oriented climate (Figure 5.13e). It seems that achievement orientation of the climate comes in the way of the satisfaction of the members' need for power. How and why elude reasoning.

Thus, LMX, attention, and latitude of the members--all three-were predicted by personal attributes-climate interactions. Hypothesis 12 (H12), too, finds substantial support.

Comments

So far, we have been focusing on individual interaction results counting the leaves on the trees. Now, we shall attempt to understand the results more broadly in a comparative framework.

It is evident from the results that person-environment interaction is viable for predicting members' quality of exchange, but the same interaction is not useful for leaders' quality of exhange. As mentioned earlier, the climate is perceived to be partly set by the leaders (Likert, 1967) and can be taken as the leaders' working style. Thus, the quality of interaction from the members' perspective is a function of the _fit_ between member's own attributes and the leader's working style (climate).

Before we proceed with the discussion of significant interaction results, it is worthwhile to state a few points. Firstly, the antecedents--personal attributes and climate--are taken to be relatively fixed and are presumed to be the same at the early stages of role taking in such a way that the earliest

evaluations are in terms of these person-environment interactions. Secondly, these earliest antecedent interactions lead to collaboration on unstructured tasks. Our measures of quality of exchange are the derivatives or outcomes of this collaboration. Thus, perceived contribution, affect, LMX, attention, and latitude are all supposed to be built around this collaboration. Hence, all our interactions in the previous section are discussed in terms of need-press framework to explain collaboration by the members. As a result, the independent aspects of contribution, affect, exchange, attention, and latitude are not discussed in terms of their individual conceptualizations. All the interactions are explained in general for collaboration. This does not mean that these different dimensions do not have independent antecedents. Identification of antecedents at the role making stage, when active exchanges are dominant, should reveal different dynamics for these dimensions of quality of exchange.

Broadly, the different measures/dimensions are similar, but there are also a few differences among these dimensions. Of all the five measures--perceived contribution, affect, LMX, attention, and latitude--only affect is relational and affective in nature. All the other four describe actual working relationships on the job. Thus, if at all, there are any differences in antecedent conditions, they should be for affect. Except for power-power and independence-independence interactions, all others were common to the perceived

contribution. Power-power interaction was also significant for LMX. It should be noted that LMX includes one item on satisfaction with the leader and provides affective component to the scale (Graen & Scandura, 1987). Thus, power and independence orientations of the members and the climate are more salient for affective aspects of the interaction. It has to be pointed out here that these antecedents are for the members' quality of exchange. For members' exercise of power and use of independence in the dyadic interaction, takes special significance, because as members there is little scope for them to satisfy these needs. Consequently, the satisfaction of these needs for the members leads to general satisfaction with and liking for the leaders.

Next, another interaction that needs a special mention is between the achievement orientations of the members and the climate. To a limited extent, the $\underline{n}$ Ach of the members can be taken as a reflection of their competence, and the competence of subordinates has been shown to be an important antecedent factor in predicting LMX (Kim & Organ, 1982; Snyder & Bruning, 1985). The managers' career progress is a function of the inital status in the work-group (IN/OUT) with reference to the leader (Wakabayashi & Graen, 1984) and also of their need for achievement (Andrews, 1967; Hundal, 1971). Theoretically, one can conceive of a sequence wherein $\underline{n}$ Ach of the members predicts their (members') IN/OUT-Group status which finally leads to career progress. But, the need for achievement of the members needs to get the right kind of working atmosphere (climate) to

bloom. Thus, the interaction of achievement orientations of the climate and the members is important in predicting quality of exchange. This interaction was significant for almost all the analyses--perceived contribution (both the studies), affect (both the studies), attention, and latitude. Only LMX could not be predicted by this interaction. No other interaction emerged significant with so much of consistency.

Clearly, all the significant interactions for perceived contribution and affect that emerged in both the studies are stronger interactions. In this light, interactions for perceived contribution showed more consistency than affect.

In essence, the person-environment interaction is effective in predicting members' quality of exchange.

CONCLUSIONS

In the VDL theorization, one begins with the assumption of heterogeneity of the work-group, as opposed to the assumption of homogeneity of the ALS theorists. The ALS formulators focused on leader behavior and tried to understand and evaluate it's dynamics. In their theorization, subordinates were treated as a work-group. Thus in explaining the phenomenon of leadership, they focused on the variables related to the leaders themselves (trait or behavior) and/or on other general situational variables (e.g., contingency approaches).

In VDL, too, the leader behavior is important. But, since the theorization does not begin with the assumption of

homogeneity and seeks to unravel the actual dynamics of work-unit functioning, other variables gain importance. As it has been shown amply (see chapters 1 and 4), unit differentiation does actually occur. It now becomes imperative that the leader behavior be understood and explained in this light. The differentiation of a work-unit is in terms of the subordinates and their interaction with the leader. Since subordinates are individuals (instead of a passive work-group), an evaluation of leadership has to involve the members too. Thus, both the leader and the member related variables are important in understanding leadership.

In line with this, at the very first step, we hypothesized that the personal attributes of the leader and the member (in a dyad) should interact in particular ways (e.g., following either the similarity or the complementarity rule) to predict the quality of interaction both for the leaders and for the members. The hypothesis did not find enough support in its favor and the interactions did not predict the quality of interaction--neither for the leader nor for the member. These attributes were general attitudes towards work and we have already discussed the possible causes for the failure of this hypothesis.

Next, we focused on more direct, narrow and relevant orientations (i.e., orientations towards leadership). Since the interaction is in the context of leadership, the leadership orientations are more immediate and relevant antecedents. Presumably, the interaction of the leaders' and members'

orientations towards leadership yielded significant results. The evaluations are made only from the members' or subordinates perspective. But the interaction should significantly predict leaders' quality of exchange too, though the direction of each interaction might vary.

Finally, a typical person-environment interaction also yields significant results though only for the members. But the other member of the dyad (i.e., the leader) is seen as instrumental in the creation of the environment (climate). Thus, any identification of equivalent conceptualization of the climate from the leaders' perspective must take this aspect of "instrumental other" into consideration.

In essence, the study identifies antecedent conditions only for members' quality of exchange (interaction). From the leader perspective, none could be identified. But this should not undermine the importance of the results. If leaders' effectivenes (be all and end all for most theorists) is a function of the members' (work-group's) performance, evaluation from the members' perspective is equally (if not more) important.

In the present chapter, we investigate some of the outcomes of our conceptualization of leadership. As mentioned in Chapter 1, our interest has been in the distal outcomes which are the outcomes of the quality of exchange between a leader and a member. Thus, the present chapter is divided into two parts.

The first part deals with the use of influence tactics by the leaders and the members. The influence tactics used by the two are studied as the outcomes of quality of exchange. After giving the background of social influence in the first section of this part, some hypotheses (conjectures) are stated in the second section. Results are presented and discussed in the third section, followed by some comments in the final one.

In the second part, some other outcomes for the members are discussed. In the first section, the outcomes of satisfaction, commitment, intent to leave, and unit effectiveness are reviewed in the context of leadership. Based on this and on our review of VDL in Chapter 1, some hypotheses (conjectures) are presented in the second section. Results and discussion of the survey data are presented in the third section. Finally, some comments on the results are made in the fourth section.

SOCIAL INFLUENCE

The Background

Power is such an important and pervasive phenomenon in organizations that it has been studied at every conceivable level in organizational behavior—between different organizations

(e.g., Kochan, 1975), within an organization between different subunits (e.g., Salancik & Pfeffer, 1974), and among organizational members (e.g., Ansari, 1990; Bachman, Bowers, & Marcus, 1968; Kipnis, Schmidt, & Wilkinson, 1980; Patchen, 1974).

Power is an elementary and fundamental concept in social sciences just as "energy is the fundamental concept in physics" (Russell, 1938, p. 18). Since it is a fundamental concept, it has been understood in different frameworks. In the Lewinian _field_ approach, it is the force (resultant) that A uses to influence some region of B's lifespace (Cartwright, 1959).

March (1955) understands power in the context of _decision-making_. Acording to him, power or influence is to be understood in terms of inducement of change in an organization. Thus, influence is studied and ascertained by determining it's consequences. In this framework, Dahl (1957) explains A's power over B as follows: It is the probability that B will behave in a particular way after A intervenes (exerts power) as against the probability of B indulging in that behavior without A's intervention.

Thibaut and Kelley (1959) conceptualize power in an _interaction_ framework of outcomes in exchanges. According to them, A's power over B is A's ability to affect the quality of B's outcomes. The extent of A's power is a direct function of the range of B's experienced outcomes.

Besides these three major frameworks, power has been understood as a latent force (Bierstedt, 1950), as a personality

construct (Minton, 1967), etc.

These are the broad categories for understanding the concept of power in general. For present purposes, power needs to be understood to explain and understand influence processes in organizations. We will take up power again later in connection with leadership processes.

Power and Influence

Power, as stated earlier, has been defined through a wide-ranging array of concepts. It is because power is a fundamental concept and is multifaceted that the researchers have focused on different aspects of power depending upon their aims and requirements. Thus, some have focused on sources of power (e.g., French & Raven, 1959); others have understood it as social control (Dahl, 1957); still others (e.g., Khandwalla, 1977) have viewed it as a general capacity of individuals.

Researchers have been interested in making a distinction between potential and realized power. This aspect focuses on the possession of power as being distinct from it's (power's) actual use. Potential power is realized only when there is an observable attempt to influence (Wrong, 1968). This distinction between potential and enacted components has been identified by the exchange theorists also (Blau, 1964; Emerson, 1962). Minton (1967) calls the two as latent (potential) and manifest (realized) powers and gives a more detailed description of the two. According to him, elements of effectiveness, influence, and

attempts to gain power exemplify manifest power, whereas only expressed feelings of and readiness to apply power represent latent power.

Essentially, power and influence are not synonymous. For organizational theorists (e.g., Dahl, 1957; Katz & Kahn, 1966), also, the two are different. Power is the ability to influence, it does not need to be enacted but influence has to be. Influence, hence, is the manifested (demonstrated) use of power such that, it (influence) brings out some behavioral and psychological effects in the target person.

We see that though power and influence are taken as two distinct concepts, there are close links between the two. Thus, if one were to see how some people are more influential than others, bases of power will be the best place to start with, because bases of power are the actual sources of influence.

Sources of Influence

A base of power is the source of influence in a social relationship. Different researchers have identified different bases of power in different frameworks. Etzioni (1975) identified three types of power--coercive, remunerative, and normative--with three paralell involvements on the part of organizational participants. Peabody (1962) also enumerated three sources of power: position, competence, and personal.

Reviews (e.g., Yukl, 1981) of the literature in this area suggest that, of all the classificatory schemes, the French and

Raven's (1959) seems to be the most widely used and studied taxonomy. In their original (1959) classification, they identified five bases of power--reward, coercive, legitimate, referent, and expert. Subsequently, two more--information and connection--were added to the original list (Hersey, Blanchard, & Natemeyer, 1979; Raven, 1965). Before dealing with the effects of the use of different bases of power, an understanding of these bases is in order:

> A is said to have reward power over B, if B perceives that A has the capacity to give out rewards. A will have coercive power, if B perceives that A can either eliminate rewards or can administer punishments. If B perceives that A has got the right to influence and B is obliged to get influenced, then A has legitimate power over B. A will have referent power over B, if B perceives A to be attractive. The attraction could be based on friendship, identification with a successful model, and the like. If B perceives A as having technical knowledge and expertise, A has expert power over B. Similarly, if B perceives that A has some valuable and rare information, then A has information power over B. Finally, if A is perceived to have connection and links with other influential people (inside or outside the organization), A has connection power over B.

For a manager, use of one source of power may have implications for his or her other bases of power. For example, if a leader doles out rewards, he or she might be liked much by the members, thus leading to an increase in referent power. Thus, the study of one base of power in isolation is meaningless, as a host of them could be operating together at one time. Just as one base of power gets enhanced (referent) by the use of another (reward), the use of one base also has the potential to negate others. For example, use of coercion may lead to public acceptance of the influence attempt but privately the influence

agent may be disliked outrageously (Raven & Kruglanski, 1970), thus leading to a decrease in referent powrr.

Yukl (1981, pp. 40-41), while summarizing the findings on bases of power, points out that generally, referent and expert bases of power have positive relationships with satisfaction, and negative correlations with absenteeism and turnover; legitimate and coercive powers are either unrelated or negatively related with positive criterion measures; use of reward power shows no clear trend. After summarizing the studies on power bases, Yukl (1981) recommends that, besides studying power bases, power research can also provide information about the actual use of influence attempts by the managers. Thus, what we are interested in is the behavioral manifestation of these power bases. These behavioral manifestations are called "influence strategies."

Influence Strategies

Goodchilds, Quadrado, and Raven (1975) started the identification of influence strategies by directly asking the subjects, either orally or through written essays, questions about the strategies they used to influence others. Introduction of this methodology gave impetus to research on influence strategies. A number of influence strategies have been identified (e.g., Goodchilds et al., 1975; Kipnis, 1976; Kipnis, Schmidt, & Wilkinson, 1980). It needs to be mentioned here that though some of the influence strategies fall into the power bases given by French and Raven (1959) and others, not all of them do.

On the other hand, use of coalition, ingratiation, etc. do not fall into the French and Raven classification. Thus, a description of power bases is not sufficient to study influence strategies used in organizational settings.

Further, researchers have employed Goodchilds et al.'s (1975) procedure to identify influence strategies in varying contexts (e.g., Ansari, Kapoor, & Rehana, 1984; Falbo, 1977, 1982; Falbo & Peplau, 1980; Goodstein, 1981). Influence strategies to influence friends and parents by the students (Goodchilds et al., 1975), lovers and spouse (Kipnis, 1976; Kipnis, Cohn, & Schwarz, 1976), bosses, coworkers, and subordinates (e.g., Ansari et al., 1984; Kipnis et al., 1980) have been tapped. Influence strategies used in different contexts show a lot of overlap. Following is a brief description of influence strategies used for upward (bosses), downward (subordinates), and lateral (co-workers) influence in organizations.

Assertiveness or Assertion, involves forcefully telling and demanding, showing verbal anger, pointing out rules, etc. (Kipnis, 1976). Coalition uses pressure by getting the support of coworkers and subordinates. Coalition is more often used for upward influence. As is obvious from the name, exchange of benefits involves exchange of favors and personal sacrifices. Ingratiation contains the elements of making the other person feel important, flattery, praise, etc. Manipulation involves influencing others, with the target person being unaware of being influenced (Mowday, 1978; Porter, Allen, & Angle, 1981). This too, like coalition, is used more frequently for upward influence. According to Allen, Madison, Porter, Renwick, and Mayes (1979), manipulation involves withholding or distorting information to influence. Reasoning involves the use of rational methods like giving reasons, explaining, writing memos and detailed plans, and providing facts and data to

influence. _Defiance_ or _threat_ is used when negative consequences (for the failure of influence attempt) are stated. _Upward appeal_ involves bringing pressure from some one higher up in the organizational hierarchy. Finally, the _use of sanctions_ draws upon rewards and punishments in organizations. It involves both informal (e.g., praising or criticizing) and formal (e.g., promotion or demotion) exchanges (Kipnis & Vanderveer, 1971; Mechanic, 1962; Porter et al., 1981). Another tactic which has been found more relevant in the Indian setting involves helping the target in personal matters and is called _personalized help_.

These are some of the most common strategies used in organizations. Different researchers have provided different frameworks to understand and explicate these strategies. According to Wilkinson and Kipnis (1978), these strategies can either be weak or strong. Withholding payments, threats, etc. are strong strategies; request for compliance and compromise are considered to be weak strategies. In the same vein, Falbo (1977) identified two dimensions--rational/nonrational and direct/indirect--in which influence strategies could be placed. Reasoning, compromise, etc. are rational tactics; deciet, evasion, etc. are nonrational. For second dimension, strategies of the likes of assertion, etc. are direct and manipulation, etc. are the indirect methods. Later, in the context of intimate relations, Falbo (1982) gave a two-dimensional framework to understand power strategies. One dimension consisted of the directness (direct to indirect) and the other of the interactiveness (bilateral to unilateral) of the strategies. Similarly, Farrell and Peterson (1982) identified three dimensions in the context of political behavior: internal-external, vertical-lateral, and legitimate-illegitimate. A wide

range of strategies are mapped in these three dimensions: for example, whistleblowing, lawsuits (external and illegitimate); exchange of favors, trading agreements, etc. (internal and legitimate); bypassing the chain of command, etc. (vertical); offering help, coalition, etc. (lateral).

Thus, besides identifying different influence strategies, researchers have also identified broad frameworks and models to understand and explain them. Further, attempts have been made to see the position of influence strategies in terms of other relevant variables like need for power (Kapoor, 1987; McClelland, 1975), self-confidence (Falbo, 1977; Raven & Kruglanski, 1970), cognitions of the power-holder (Kipnis, 1976), goals of influence attempts (Ansari & Kapoor, 1987; Kipnis & Schmidt, 1983), attribution of success and failure on influence strategies (Schilit & Locke, 1982; Tandon, Ansari, & Kapoor, in press). Leadership is another such variable, that needs to be studied along with power and influence.

Leadership and Bases of Power

The obvious and very direct link between power and leadership can be understood in Cartwright's (1965) conceptualization of influence. According to him,

> When an agent (exerting influence), O, performs an act resulting in some change in another agent (subjected to influence), P, we say that O influences P (p. 4).

Extending this concept of influence, Kochan et al., 1976, p. 285) define leadership in that framework (see Chapter 1 for the

definition).   Thus, influence is common to both--leadership and
power.

So far as research on leadership and power is concerned, the
major thrust of the researchers has been on the relationship
between power bases and leader behavior. Kipnis (1958), in one
of the earliest attempts, compared the effectiveness of directive
and participative leadership styles in conjunction with reward
and punishment.   The effectiveness was measured in terms of
public compliance and private acceptance (by the members) of the
inluence   attempt.   The results showed that though   public
compliance was same for all the conditions, private acceptance
showed some   interesting variations.   Participative   leadership
showed more private acceptance than directive leadership for
reward condition, but less private acceptance for the punishement
condition.   Mulder and his associates (Mulder,   de   Jong,
Koppelaar, & Verhage, 1977) investigated the relationship between
power and leadership in a banking concern. They found that the
leaders exerted more formal, referent, and expert powers in
crisis situations than in noncrisis situations.   Further, they
found that the crisis/noncrisis nature of the situation moderated
the   relationship between the type of leadership and   the
effectiveness of the leader. Subsequently, Mulder, Binkhorst,
and Van Oers (1983) suggested that, in crisis   situations
(difficult requirements), consultants should be able to exert
power forcefully and should be able to   maintain open
relationships   with others. Martin and Hunt (1980), in   a

systematic, path-analytic study, were mainly concerned with investigating the effect of social influence on intent to leave. Their study also revealed how the use of different bases of power resulted in the difference in the perception of the leaders' behavior. These results showed variations across different units (bureaus).

Leadership and Influence Strategies

Studies relating leadership with influence strategies are few and far between. Most of them have been concerned with evaluating leaders' use of strategies to influence subordinates and their effect on them (subordinates).

Kipnis, Schmidt, Price, and Stitt (1981) examined the effect of leaders' use of influence strategies on their assessment of the followers' motives via employee evaluations. Their results revealed that the leaders who were expected to act democratically showed a greater use of noncontrolling influence strategies and those expected to act autocratically showed a greater use of controlling influence strategies. Further, leaders using controlling tactics reported that their subordinates were not self-motivated and those using noncontrolling tactics attributed the subordinate performance to their self-motivation. In yet another study, Singh (1985) investigated the effect of leadership styles on their influence strategies. He reported that four styles--people-orientation, power orientation, impersonal orientation, and suspicion and limited role--predicted the use of

different influence strategies. For example, the suspicion and limited role style predicted the use of strategies like reliance, psuedo-nurturance, and diplomacy.

The discussion, so far, leads us to the conclusion that it is only the leaders who influence and use different strategies to influence the subordinates. This is not really the case. Although the mutuality of influence processes has been recognized, few studies have investigated this aspect. All the same, there have been efforts to identify the influence of the subordinates over their leaders in different contexts (e.g., Grosser, Polansky, & Lippitt, 1951; Polansky, Lippitt, & Redl, 1950). A direct test of two-way influence process has been provided by Bass (1975) in a simulation (field experimental) setting, by Herold (1974) in an experimental setting, and by Greene (1979) in a survey research.

Though the fact about mutual influence processes has been recognized, there have been very few studies (e.g. Ansari, 1990) evaluating the actual use of strategies used by the subordinates.

Based on these deficiencies and needs, we now frame our hypotheses in the present micro-level analysis.

Some Conjectures

Mention has been made of the exchanges between the leader and the member in Chapter 1. Our theory of dyadic linkages is based on the exchanges between a leader and an individual subordinate (Graen & Cashman, 1976). In this process of

exchange, each party makes demands on the other. Each one's job is defined and decided through negotiations. We focus on the mutual influence in a dyad. But, Fujii (1977) reports' that dyadic anslysis is not too different from the analysis based on group means.

In this work, we focus on both the upward (used by the members) and the downward (used by the leaders) influence strategies. Also, we investigate whether it is the average or individual quality of interaction that predicts the use of different strategies. Dienesch and Liden (1986) also presume (theoretically) an interaction effect of the quality of interaction dimension on certain outcome variables. Hence,

H1: Leaders' influence strategies (downward) are a function of their quality of interaction.

H2: Leaders' influence strategies are a function of the interaction of their perceived contribution and affect.

H3: Members' influence strategies (upward) are a function of their own quality of exchange.

H4: Members' influence strategies are a function of the interaction of their perceived contribution and affect.

H5: Members' influence strategies are better predicted by their individual (VDL) as compared to the average (ALS) quality of exchange.

It needs to be mentioned here that even the leader's use of influence strategy is expected to be predicted better by the individual (VDL) quality of interaction than by the group scores. But, this contention could not be tested here because of the lack of sufficient data.

Specifically, rational (e.g., reasoning) and informal and weak strategies (e.g., personalized exchange) are expected to be a direct function of the quality of interaction. Formal and strong strategies (e.g., assertion) are expected to be inversely related to the quality of interaction from both the perspectives.

Results and Discussion

Downward Influence Strategies

As a test of hypothesis 1, both the quality of interaction measures--perceived contribution and affect--were put in a stepwise regression equation as predictors for each of the seven influence strategies. This hypothesis was tested only in Study 1. Zero-order correlations between the predictors and criterion variables are reported in Table 6.1. The regression results for hypothesis 1 are given in Table 6.2.

It can be seen that perceived contribution, in general, is a better predictor of influence strategies than affect. It significantly predicts the use of informal external support, personalized exchange, reasoning, persuasion, and assertion. Affect predicts the use of assertion. However, the use of showing expertise as a strategy could not be predicted significantly by any of the two quality of interaction dimensions.

It is evident from the tables that both, personalized exchange and reasoning, are a direct function of perceived

contribution. On the other hand, informal external support, persuasion and assertion are a negative function of the same. The results are much in line with our conjectures.

Table 6.1

Zero-order Correlations between Leaders' Quality of Interaction (Predictors) and Influence Tactics (Criterion Variables) (Study 1)

	IES	I	PE	R	PR	A	SE
PC	-.35	-.13	.36	.34	-.48	-.53	-.19
AF	.13	.28	-.15	.21	-.30	-.32	-.11

Note. $r(150)$ = .21 at p < .01; $r(150)$ = .16 at p < .05; IES = Informal External Support; I = Ingratiation; PE = Personalized Exchange; R = Reasoning; PR = Persuasion; A = Assertion; SE = Showing Expertise; PC = Perceived Contribution; AF = Affect.

Reasoning is a rational tactic and hence it's use for the subordinates with high perceived contribution seems justified. Further, since better quality dyads are characterized with informal exchanges, the use of personalized exchanges, too, is much in consonance with our argument. The leader uses more of informal external support, persuasion, and assertion, if their perceived contribution is low. Clearly, the leader uses formal and strong measures to influence these subordinates (i.e., lower quality of interaction). Earlier work by Ansari, Tandon, and Lakhtakia (1989) reported similar results.

Table 6.2

Stepwise Regression Results--Leaders' Quality of Interaction (Predictors) and Leaders' Influence Strategies (Criterion Variables) (Study 1)

Predictors

Criterion	PC	AF
IES		
R	.35	*
R^2 change	.12	*
Beta	-.35[a]	*
Order	1	*
I		
R	.29	.28
R^2 change	.00	.08
Beta	-.03	.30[a]
Order	2	1
PE		
R	.36	.36
R^2 change	.13	.00
Beta	.38[a]	-.05
Order	1	2
R		
R	.34	.34
R^2 change	.11	.00
Beta	.31[a]	.04
Order	1	2

PR

R	.48	.48
R^2 change	.23	.00
Beta	−.44[a]	−.07
Order	1	2

A

R	.53	.48
R^2 change	.28	.00
Beta	−.50[a]	−.06
Order	1	2

SE

R	.19	.19
R^2 change	.03	.00
Beta	−.18	−.02
Order	1	2

Note. $N = 152$; $a = p < .01$; * Tolerance level insufficient for further computations; IES = Informal External Support; I = Ingratiation; PE = Personalized Exchange, R = Reasoning; PR = Persuasion, A = Assertion; SE = Showing Exchange; PC = Perceived Contribution; AF = Affect.

Thus, clearly, the leaders' use of different strategies to influence the subordinates is determined by their (leaders') quality of exchange with their members.

The interaction of the two dimensions (perceived contribution and Affect) of the quality of interaction predicted the use of only one strategy—Informal External Support. The

Table 6.3

Hierarchical Regression Results—Interaction of the Leaders' Perceived Contribution and Affect as a Determinant of their Influence Strategies (Study 1)

	PC	$(-.16^a,$ .12)
IES	AF	$(-.06,$ .00)
	PC x A	$(.33^a,$ .09)
	PC	$(.05,$ .02)
I	AF	$(.27^a,$ .06)
	PC x A	$(.13,$ .01)
	PC	$(.35^a$ .13)
PE	AF	$(-.04,$ .00)
	PC x A	$(-.06,$ .00)
	PC	$(.24^a,$ .11)
R	AF	$(.07,$ .01)
	PC x A	$(-.13,$ .01)
	PC	$(-.43^a,$ .23)
PR	AF	$(-.08,$ .00)
	PC x A	$(.02,$ .00)
	PC	$(-.51^a,$ .28)
A	AF	$(-.06,$ .00)
	PC x A	$(-.01,$ .00)

	PC	(−.15[b],	.03)
SE	AF	(−.03,	.00)
	PC x A	(.05,	.00)

Note. N = 152; a p < .01; IES = Informal External Support; I = Ingratiation; PE = Personalized Exchange; R = Reasoning; PR = Persuasion; A = Assertion; SE = Showing Expertise; PC = Perceived Contribution; AF = Affect. Figures in parantheses indicate beta coefficients and R square change, respectively.

hierarchical regression results are reported in Table 6.3 and the means are reported in Table 6.4. Leaders used the strategy of informal external support the most when both, perceived contribution and affect, were low; the use of this strategy was minimum when perceived contribution was high but affect was low. Thus, a combination of low quality of interaction leads to a greater use of informal external support. Except this influence strategy, no other strategy could be predicted by this interaction.   In general hence, the interaction hypothesis does not find enough support. Though, the two dimensions independently do predict the use of influence strategies, jointly they do not.

Next, we focus on the members' use of influence strategies.

Upward Influence Strategies

The next three hypotheses (H3, H4, and H5) are concerned with the members' use of strategies to influence their leaders. Three main predictors are taken up--the independent effects of the quality of exchange, joint effect of the two dimensions of

Table 6.4

Mean Scores--Leaders' Influence Strategies as a Function of the Interaction of their Perceived Contribution and Affect (Study 1)

	PC AF	Low	High
IES	Low	15.64	13.21
	High	14.65	15.41
I	Low	15.99	16.36
	High	19.29	21.91
PE	Low	17.36	25.00
	High	19.23	18.36
R	Low	20.39	20.86
	High	20.71	21.36
PR	Low	11.14	09.50
	High	10.29	08.09
A	Low	08.45	06.79
	High	08.53	06.27
SE	Low	27.18	26.07
	High	25.00	25.00

Note.   See Table 6.3

the quality of interaction, and a comparison of average and individual measures of the quality of exchange. The three issues are addressed under the following three subheads.

Independent Effects of Quality of Exchange

Hypothesis 3 was tested in Study 1 and then retested in Study 2. In Study 1, three quality of exchange measures--perceived contribution, affect, and leader-member exchanges (LMX)--were taken as the predictors of different influence strategies used by the members. In study 2, four quality of exchange measures--perceived contribution, affect, attention, and latitude--were taken as the predictors. First, the results of Study 1 are discussed. Then we discuss the Study 2 results.

Study 1 Results. The zero-order correlations between the three predictors and five criterion variables are reported in Table 6.5. The results of stepwise regression analysis are reported in Table 6.6.

The use of informal external support could not be predicted significantly by any of the three quality of exchange measures. Ingratiation is best predicted by affect. Seemingly, members ingratiate when the affect is low for the leaders. This means that all the positive words and praises the member uses are mere verbal tactics to get their way. Ingratiation is not considered a rational tactic; it is more a part of politiking and manipulation. The use of this strategy by the members who have little affect for the leader reinforces this contention.

Personalized exchange, too, is predicted best by affect.

Unlike ingratiation, personalized exchange is used more when affect for the leader is high. Essentially, more affect means more interaction with the leader and a greater willingness to help the leader on personal aspects. This shows that whereas the use of personalized exchange is genuine, ingratiation is not.

Table 6.5

Zero-order Correlations of the Members' Quality of Exchange (Predictors) with their Influence Strategies and other Outcome Variables (Study 1)

	IN					OUT			
	IES	I	PE	R	PR	ES	IS	CO	IL
PC	−.09	.21	.26	.31	.03	.34	.35	.35	−.18
AF	.07	−.29	.27	.11	.10	.28	.26	.27	−.17
LMX	−.06	.19	.21	.39	.02	.33	.38	.38	−.15

Note. $r(150) = .21$ at $p < .01$; $r(150) = .16$; at $p < .05$; IN = Influence Strategies; IES = Informal External Support; I = Ingratiation; PE = Personalized Exchange; R = Reasoning; PR = Persuasion; ES = Extrinsic Satisfaction; IS = Intrinsic Satisfaction; CO = Commitment; IL = Intent to Leave; PC = Perceived Contribution; AF = Affect; LMX = Leader-Member Exchanges; OUT = Other Outcome Variables.

Reasoning was best predicted by LMX followed by Affect. In line with our conceptualization of dyadic interactions, reasoning should be used for influence on the actual job situation. Therefore, it (reasoning) should be better predicted by the quality of exchange measures containing elements of actual

Table 6.6

Stepwise Regression REsults--Members' Quality of Exchange (Predictors) and their Influence Strategies (Study 1)

Predictors

Criterion	PC	AF	LMX
IES			
R	.09	.17	.17
R^2 change	.01	.02	.00
Beta	-.15	.17	-.03
Order	1	2	3
I			
R	.30	.29	.30
R^2 change	.00	.08	.00
Beta	.10	-.25[b]	-.01
Order	2	1	3
PE			
R	.30	.27	.30
R^2 change	.02	.06	.00
Beta	.19	.19[b]	-.04
Order	2	1	3
R			
R	.44	.44	.39
R^2 change	.00	.04	.15
Beta	.06	.19[b]	.43[a]
Order	3	2	1

PR

R	*	.10	.10
R^2 change	*	.01	.00
Beta	*	.01	.00
Order	*	1	2

Note.   N = 152; a p < .01; b p < .05; * tolerance level insufficient for further computations. For abbreviations, see Table 6.5.

job situations. LMX is essentially work oriented and if it predicts the use of reasoning, it seems justified. All the same, members' affect for their leader too predicts the use of reasoning. Obviously, members give reasons when they have a high affect for him or her (the leader).

Finally, the use of persuasion could not be predicted by any of the three quality of exchange measures.

It is interesting to note that though for the leaders perceived contribution was a better predictor, for the members affect was a better predictor. Moreover, whereas the predictive strength is high for the leaders' perspective, it is usually not so strong for the members' perspective. We will take up these observations a little later (see section on comments). For the moment, let us look at the Study 2 results.

Study 2 Results. Zero-order correlations between the four predictors--perceived contribution, affect, attention, and latitude (individual scores)--and five influence strategies

(criterion measures) are give in Table 6.7. Results of the stepwise regression analysis are reported in Table 6.8.

Table 6.7

Zero-order Correlations of the Members' Quality of Exchange (individual and group scores as predictors) with their Influence Strategies and other Outcome Variables (Study 2)

		IN					OUT			
		IES	I	PE	R	PR	ES	IS	CO	UE
PC	Id	−.58	−.08	.21	.58	−.25	.57	.50	.59	.60
	Gr	−.14	.01	−.10	.23	−.24	.40	.33	.31	.11
AF	Id	−.51	.01	.21	.49	−.16	.49	.52	.57	.62
	Gr	−.17	.14	.08	.24	−.03	.40	.38	.34	.28
AT	Id	−.66	−.06	.34	.66	−.19	.58	.47	.66	.74
	Gr	−.17	−.05	.12	.24	.02	.35	.22	.27	.25
LT	Id	−.63	−.10	.32	.60	−.19	.55	.42	.60	.70
	Gr	−.19	−.09	.02	.14	−.02	.23	.13	.24	.23

Note. $r(94) = .19$ at $p < .01$; $r(94) = .26$ at $p < .05$; IN = Influence Strategies; OUT = Other Outcome Variables, IES = Informal External Support; I = Ingratiation; PE = Personalized Exchange; R = Reasoning; PR = Persuasion; ES = Extrinsic Satisfaction; IS = Intrinsic Satisfaction; CO = Commitment; UE = Unit Effectiveness; PC = Perceived Contribution; Gr = Group Score; Id = Individual Score.

Table 6.8

Stepwise Regression Results--Members' Quality of Exchange (Predictors) and their Influence Strategies (Criterion Variables) (Study 2)

Predictors

Criterion	PC	AF	AT	LT
ISE				
R	*	*	.66	.69
R^2 change	*	*	.44	.04
Beta	*	*	$-.43^a$	$-.27^b$
Order	*	*	1	2
I				
R	*	*	*	*
R^2 change	*	*	*	*
Beta	*	*	*	*
Order	*	*	*	*
PE				
R	*	*	.34	*
R^2 change	*	*	.11	*
Beta	*	*	$.34^a$	*
Order	*	*	1	*

<u>R</u>

R	*	*	.66	*
R^2 change	*	*	.44	*
Beta	*	*	.66[a]	*
Order	*	*	1	*

<u>PR</u>

R	.25	*	*	*
R^2 change	.06	*	*	*
Beta	-.25[b]	*	*	*
Order	1	*	*	*

<u>Note</u>. N = 96; a p < .01; b p < .05; * Tolerance level insufficient for further computations. For abbreviations, see Table 6.7.

Clearly, attention is the best predictor, predicting three (informal external support, personalized exchange, and persuasion), out of five influence strategies. Use of informal external support is a negative function of attention and latitude. Neither ingratiation nor persuasion could be predicted by any of the four predictors. Personalized exchange and reasoning both are a positive function of attention. If attention is low, member is likely to go to others (coworkers) for help, but if the attention is high the member indulges in personal exchanges and use of logic to influence the leader.

Surprisingly, affect, unlike in Study 1, did not predict the use of any strategy. However, perceived contribution predicted

the use of persuasion. Persuasion was used more by the members when their perceived contribution was low. The member uses pressure tactics (Ansari et al., 1989; Yukl & Falbe, 1990) to influence the leader who is perceived to contribute less.

In Study 1, the best predictor was affect; but in Study 2, attention emerged as the best predictor. Affect did not emerge at all as a predictor of any strategies in Study 2. In Study 1, all the three measures of quality of exchange are the general measures of exchange (e.g., leaders' contribution on the jobs, nature of exchanges, and affect for the leader). Of these three general measures, affect is the best predictor. When these general measures are put along with more specific dimensions (e.g., attention and latitude), the specific dimensions emerge as better predictors of influence strategies. Influence strategies, too, are actual behaviors on the job and their prediction by actual leader behavior (attention) seems justified.

If one were to look at the global quality of exchange as a predictor of members' influence strategies, personalized exchange and reasoning are a direct function of the quality of exchange (affect and LMX in Study 1, and attention in Study 2)--this is all we have for the consistency of results in both the studies.

In Study 2, the use of informal external support (IES) and persuasion (PR) were also predicted by the quality of exchange measures (unlike in Study 1). IES was an inverse function of both attention and latitude, and like in Study 1, neither perceived contribution nor affect predicted the use of this

strategy. But the use of persuasion was predicted by perceived contribution in Study 2 which was not evident in Study 1. This is a discrepancy in the results of the two studies which is difficult to explain.

Interaction Effect of Perceived Contribution and Affect

The interaction effects of the two dimensions of the quality of interaction were evaluated through a hierarchical multiple regression analysis. The regression results are reported in Table 6.9, and the means are reported in Table 6.10.

Only informal external support was predicted by the interaction of perceived contribution and affect (Table 6.9). Members used informal external support the most when both, perceived contribution of and affect for the leader, were low. But it was used the least when the perceived contribution was low and affect was high. Low PC and low AF together make for a poor quality of interaction, which is not a conducive situation for the member to approach the leader directly for any influence attempts. The use of external support to pressurize the leader, in this case, seems appropriate. On the other hand, even if PC is low but AF is high, member does not depend on the use of external support.

Rest of the four strategies could not be predicted by the interaction of PC and AF. The interaction effects from the members' perspective have a striking similarity to the effects from the leaders' perspective.

Table 6.9

Hierarchical Regression Results—Interaction of the Members'
Perceived Contribution and Affect as a Determinant of their
Influence Strategies (Study 1)

	PC	$(-.02, .01)$
IES	AF	$(.10, .02)$
	PC x AF	$(.28^{a}, .06)$
	PC	$(.17^{a}, .04)$
I	AF	$(.21^{a}, .04)$
	PC x AF	$(.15, .02)$
	PC	$(.20^{a}, .07)$
PE	AF	$(.17^{b}, .02)$
	PC x AF	$(.06, .00)$
	PC	$(.32^{a}, .10)$
R	AF	$(-.06, .00)$
	PC x AF	$(-.05, .00)$
	PC	$(-.02, .00)$
PR	AF	$(.11, .01)$
	PC x AF	$(.02, .00)$

Note.   Same as Table 6.3

Table 6.10

Mean Scores--Members' Influence Strategies as a Function of the Interaction of Their Perceived Contribution and Affect (Study 1)

| | PC | | |
	AF	Low	High
IES	Low	23.00	16.06
	High	15.00	15.46
I	Low	17.33	16.61
	High	20.17	26.50
PE	Low	15.17	20.15
	High	18.06	23.83
R	Low	20.61	23.69
	High	19.89	22.50
PR	Low	9.63	10.08
	High	9.94	12.83

Note.   Same as Table 6.3.

In general, thus, the interaction of PC and AF does not significantly predict the use of upward influence strategies. Thus, hypothesis 4 (H4) finds little support.

Average Vs Individual Quality of Exchange as Predictors

In the last two subsections, we focused on the independent and interaction effects of quality of exchange measures. Though main effects were significant, interaction effects were not. Next, we evaluate the relative strengths of average and dyadic conceptualizations. For this purpose, we take the group quality of exchange representing average QEx and individual QEx representing a differentiated-unit conceptualization.

Table 6.11

Stepwise Regression Results—Members' Perceived Contribution (Group and Individual Scores as Predictors) and Their Influence Strategies (Criterion Variables) (Study 2)

Predictors

Criterion	PC(Id)	PC(Gr)
IES		
R	.58	*
R^2 change	.33	*
Beta	$-.58$[a]	*
Order	1	*
R	*	*
R^2 change	*	*
Beta	*	*
Order	*	*

PE

R	.21	.30
R^2 change	.05	.05
Beta	$.32^a$	$-.24^b$
Order	1	2

R

R	.58	*
R^2 change	.34	*
Beta	$.58^a$	*
Order	1	*

PR

R	.25	*
R^2 change	.06	*
Beta	$-.25^a$	*
Order	1	*

Note.   N = 96; a $p < .01$; b $p < .05$; * Tolerance level insufficient for further computations. For abbreviations, see Table 6.7.

To evaluate the two together, they were put to a stepwise regression analysis (see Chapter 3). As was mentioned earlier, data from Study 2 (members' perspective) was used for this purpose. The stepwise regression results for PC, AF, AT, and LT are reported in Tables 6.11, 6.12, 6.13, and 6.14, respectively. We shall present each result separately.

The individual socres of perceived contribution predict the use of informal external support, personalized exchange, reasoning, and persuasion at the first step (Table 6.11). Group scores predict the use of personalized exchange (PE) but only at the second step. Clearly, individual scores are better predictors. Besides PE, none of the other influence strategies could be predicted by the group scores. Ingratiation could not be predicted by any of the two scores. So far as PC is concerned, results for persuasion are of prime importance as PC (in Study 2) significantly predicts the use of this strategy. It is the individual PC score that predicts the use of this strategy, which is an evidence for variations within a work-group, so far as influencing a leader (with respect to PC) is concerned. Use of personalized exchange is predicted both by the individual and group scores of PC. For which there is evidence of both average and dyadic leadership. This is an equivocal (reject) condition and the level of analysis for this cannot be predicted.

Next, the individual scores of affect predict the use of informal external support, personalized exchange, and reasoning (Table 6.12). The group scores do not predict any influence strategy. Though affect, when put together with other measures of quality of exchange, does not emerge as a significant predictor (Study 2); but when individual and group scores are taken, individual scores are clearly better predictors. This is a direct evidence for dyadic (unit-differentiation) conceptualization.

Table 6.12

Stepwise Regression Results—Members' Affect (Group and Individual Scores as Predictors) and Their Influence Strategies (Criterion Variable) (Study 2)

Predictors Criterion	AF(Id)	AF(Gr)
IES		
R	.51	*
R^2 change	.26	*
Beta	-.51[a]	*
Order	1	*
I		
R	*	*
R^2 change	*	*
Beta	*	*
Order	*	*
PE		
R	.21	*
R^2 change	.04	*
Beta	.21[b]	*
Order	1	*

R

R	.49	*
R^2 change	.24	*
Beta	.49[a]	*
Order	1	*

PR

R	*	*
R^2 change	*	*
Beta	*	*
Order	*	*

Note. $\underline{N}$ = 96; a $\underline{p}$ < .01; b $\underline{p}$ < .05; * Tolerance level insufficient for further computations. For abbreviations, see Table 6.7.

Table 6.13

Stepwise Regression Results—Members' Attention (Group and Individual Scores as Predictors) and Their Influence Strategies (Criterion Variables) (Study 2)

Predictors

Criterion	AT(Id)	AT(Gr)

IES

R	.66	*
R^2 change	.43	*
Beta	-.66[a]	*
Order	1	*

I

R		*	*
R^2 change		*	*
Beta		*	*
Order		*	*

PE

R		.34	*
R^2 change		.11	*
Beta		.34[a]	*
Order		1	*

R

R		.66	*
R^2 change		.44	*
Beta		.66[a]	*
Order		1	*

PR

R		*	*
R^2 change		*	*
Beta		*	*
Order		*	*

Attention emerged as the best predictor of informal external support, personalized exchange, and reasoning when put along with the other measures of QEx (Table 6.8). For all the three strategies, individual scores of attention are better predictors than the group scores (Table 6.13). Clearly, the individual attention given to the subordinates is a better predictor than collective attention (group AT).

Table 6.14

Stepwise Regression Results—Members' Latitude (Group and Individual Scores as Predictors) and Their Influence Strategies (Criterion Variables) (Study 2)

Predictors

Criterion	LT(Id)	LT(Gr)
IES		
R	.63	*
R^2 change	.39	*
Beta	$-.63$[a]	*
Order	1	*
I		
R	*	*
R^2 change	*	*
Beta	*	*
Order	*	*

PE

R	.32	*
R^2 change	.10	*
Beta	.32[a]	*
Order	1	*

R

R	.61	*
R^2 change	.36	*
Beta	.61[a]	*
Order	1	*

PR

R	*	*
R^2 change	*	*
Beta	*	*
Order	*	*

Note. N = 96; a $p < .01$; b $p < .05$; * Tolerance level insufficient for further computations. For abbreviations see Table 6.7.

Latitude predicted the use of informal external support, though only at the second step after attention (Table 6.8). For IES, individual latitude scores emerged as a significant predictor, (Table 6.14) thus providing an evidence for a differentiated unit. Besides this, the individual LT scores also predicted the use of personalized exchange and reasoning when put

together with the group scores. Group scores did not predict the use of any influence strategies.

No doubt, the inflated results providing evidence for individual scores can be attributed, to some extent, to common method variance. All the same, a look at the four tables (Tables 6.11 through 6.14) shows that all the individual quality of exchange scores that predicted the use of influence strategies were highly significant. Thus, if there were minor differences in the results for individual and group scores, the assertion for any one level would have been shaky, but such vast differences in the two results indicate an individual level of analysis, despite common method variance.

One point needs to be mentioned here. The present results are only an evidence against average and for individual level of analysis. We are not asserting a within-group (i.e., group parts level) variation, as the individual scores are not represented in terms of groups (i.e., as deviations from group scores).

Comments

Broadly speaking, the use of both the upward and the downward influence strategies are predicted by the quality of exchange as a measure of leadership. Ansari (1990) conducted an exhaustive study of leadership styles in relation to upward and downward influence strategies. It needs to be noted here that the leadership style (of the leaders) and leadership behavior (perceived by the subordinates) dimensions though are taken from

the average conceptualization, the relationship between the influence strategies and leadership orientations (behaviors or styles) is essentially at the individual level. The relationship is evaluated through stepwise regression where the individual responses on different dimensions are put in the regression equation. Thus, the results of this study too are an evidence for the individual level. Much in line with this, the results of the present study too find connection between leadership and influence strategies. In the present study, the measures developed on the basis of exchanges and interactions between a leader and a member significantly predict the use of influence strategies by the two (the leader and the member).

It is of interest to note that, in Study 1, PC was a better predictor for downward influence strategies; but for the upward strategies, affect emerged as a better predictor. In essence, the use of particular tactics by the leader is guided by on-the-job activites of the subordinates (contribution) but the use of strategies by the member is more a function of their (members') affective orientation towards the leader. Secondly, the interaction effects of PC and AF were significant neither for the upward nor for the downward influence strategies, in general. However, from both the perspectives, informal external support was predicted by the interaction of PC and AF, and from both the prespectives, low PC and low AF disclosed the maximum use of IES. But, so far as minimum use of IES is concerned leaders'

perspective (downward) was guided by PC and the members'
perspective (upward) was guided by AF--a corroboration of the
previous observation.

Finally, the individual scores of QEx were better predictors
of influence strategies in general than the group scores,
providing a rather strong evidence for the VDL.

In essence, hence, power and influence in the context of
leadership is relevant both for the leaders (downward) and the
members (upward). Further, power and influence dynamics has
variations within groups and the right entity to focus on is
group-parts. Undoubtedly the hierarchy in organizations provides
for a readymade exercise of power by the leader, but the members
too exercise power over leaders, and there is evidence for a two-
way influence process. Within a group (under a leader), the
members have different amount of power over (extent of influence)
and also different bases of power for the leader which is a
function of the quality of exchange between the two. Similarly,
the leader too has different amount of power over and also
different bases of power for the member. Thus, in the context of
leadership, power dynamics needs to be studied at this level.

OTHER OUTCOME VARIABLES

The Background

The role of leadership in subordinates' affective and
behavioral experiences is well recognized. Almost all the

theories and conceptualizations have studied this relationship. We shall briefly review as to how different theorizations have studied these outcome variables.

The earliest conceptualization of leadership in terms of authoritarian and democratic styles also correlated the two styles with different outcomes. Studies have been conducted to show the strength of each in predicting the performance of the subordinates. Results provide evidence for both the dimensions. Some (e.g., Torrance, 1953) reported autocratic style to be more effective; others (e.g., Argyle, Gardner, & Ciofi, 1958) found democratic style to be more effective; still others (e.g., Ziller, 1957) reported that none of the two styles was significantly related to criterion measures.

Studies have also been conducted to see the effect of these two styles on satisfaction. Most studies (e.g., Ziller, 1957) report the superiority of democratic style in predicting higher employee satisfaction. All the same, some studies (e.g., White, 1963) have discovered that there is no difference between autocratic and democratic styles, so far as subordinate satisfaction is concerned.

The effects of directive and participative leaderships on subordinate performance, commitment, and satisfaction have also been studied. Subordinate performance has been understood in terms of the quality of decisions and productivity. Group decisions are believed to be superior to the decisions made by an average member of that group. In line with this, the

quality of decision under participative style has been reported to be better (Blake & Mouton, 1962) but the results for productivity are mixed, with some (e.g., Schumer, 1962) reporting the superiority of directive leadership and others (e.g., Lawrence & Smith, 1955) claiming the superiority of participative style. An optimum level of participation seems to be effective in productivity; participation above or below that level affects performance adversely (Likert, 1959). So far as subordinate satisfaction is concerned, mostly participative style has been shown to be positively related to satisfaction (e.g., Preston & Heintz, 1949). However, some results are mixed with respect to subordinate satisfaction—for example, Farrow, Valenzi, and Bass (1980) found both the styles to be positively related to subordinate satisfaction. Employee commitment, loyalty, and job involvement too have been shown to be positively correlated with participative style (e.g., Kahn & Tannenbaum, 1957).

Task and relationship orientations of the leader too have been studied in determining subordinate performance and satisfaction. Some studies (e.g., Pandey, 1976) have shown the relationship oriented leadership to be a superior predictor of follower performance, others (e.g., Litwin, 1968) found the task-oriented leader to be more effective. Besides the independent effects of the two, their joint effect has also been reported to significantly predict subordinate performance. High task and high relation orientations of a leader, according to Blake and Mouton (1962), positively affect the performance—a finding

corroborated by others as well (e.g., Kahn & Katz, 1953). For subordinate satisfaction, generally, relationship oriented leadership has been found to be more effective (e.g. Mann & Hoffman, 1960).

The two dimensions of leader behavior—consideration and initiating structure—developed in the Ohio State Studies too have been shown to affect subordinates' outcomes. Both the dimensions have been shown to be positively related to satisfaction (House & Filley, 1971), effectiveness (Fleishman & Simmons, 1970), and productivity (Lawshe & Nagle, 1953). Studies have also reported a curvilinear relationship between the two dimensions and subordinate's experiences. Fleishman and Harris (1962) observed the effect of initiating structure and consideration on employee turnover and greivances. They report that high and medium degrees of consideration coupled with low structure showed the lowest rates of employees turnover and grievances.

The effect of different styles as a function of situational contingencies too has been explored. Patchen (1962), for example, showed that directive supervision, in a cohesive group whose leader was seen as a rewarding figure, had a high output. Centrality of problem (Bass & Ryterband, 1979), communication networks (Shaw, 1954), etc. too have been taken as situational contingencies, besides leader-member relations, position power (of the leader), and task structure.

Thus, all the major theorizations understand and explain leadership in terms of subordinates outcomes.

Some Conjectures

In Chapter 1, we discussed the outcomes (consequences) studied in the VDL framework. The review suggests that the previous researches have provided evidence for dyadic leadership and they too have predicted the members' outcomes.

In view of the brief review of literature in the last section and also in Chapter 1 (consequences of VDL), we take the following outcome variables: satisfaction (Extrinsic (ES) and Intrinsic (IS)); commitment (CO); intent to leave (IL); and unit effectiveness (UE). Intent to leave was taken in Study 1 only, and unit effectiveness in Study 2 only. Extrinsic satisfaction, Intrinsic satisfaction, and commitment were taken in both the studies.

Following three general hypotheses are framed:

H6: Members' outcomes are a function of their quality of exchange.

H7: Members' outcomes are a function of the interaction of perceived contribution and affect.

H8: Members' outcomes are better predicted by their individual (VDL) as compared to the average (ALS) quality of exchange scores.

All the outcome variables are the subordinates' own perception, included in it is the unit effectiveness. It is hypothesized that the individual perception (of the subordinates)

of unit effectiveness is a function of the individual quality of exchange. Hence, it is not a measure of the objective performance of the work-group.

Results and Discussion

Independent Effects of Quality of Exchange

The independent effects of QEx were measured both in Study 1 and Study 2.

Study 1 Results

Perceived contribution, affect, and leader-member exchanges (LMX) were the three measures of quality of exchange used as predictors in Study 1. The criterion measures (outcomes) in this study were--ES, IS, CO, and IL. The zero order correlations between predictors and criterion are reported in Table 6.5. The stepwise regression results for this study are reported in Table 6.15. Clearly, the two quality of interaction dimensions (perceived contribution and affect) did not predict any of the four outcome variables. However, LMX predicted intrinsic satisfaction and commitment (though not very strongly, $p < .05$). Both the outcomes are high, if LMX is high. Obviously, high leader-member exchanges predict greater intrinsic satisfaction and commitment of the subordinates. If LMX is high, the subordinate is naturally involved in collaboration on unstructured jobs and consequently the commitment too is high. As mentioned earlier (Chapter 5), leadership is a proximal representation of the organization for the subordinates. On the

Table 6.15

Stepwise Regression Results--Members' Quality of Exchange
(Predictors) and Their Outcome Variables (Study 1)

Predictors

Criterion	PC	AF	LMX
ES			
R	.34	.36	.37
R^2 change	.12	.01	.00
Beta	.17	.12	.13
Order	1	2	3
IS			
R	.39	.39	.38
R^2 change	.00	.00	.14
Beta	.12	.06	.25[b]
Order	2	3	1
CO			
R	.39	.40	.38
R^2 change	.01	.00	.15
Beta	.12	.08	.25[b]
Order	2	3	1
IL			
R	.18	.20	.20
R^2 change	.03	.01	.00
Beta	-.15	-.10	.02
Order	1	2	3

Note. N = 152; b p < .05; PC = Perceived Contribution; AF = Affect; LMX = Leader–Member Exchanges; ES = Extrinsic Satisfaction; IS = Intrinsic Satisfaction; CO = Commitment; IL = Intent to Leave.

whole, the general commitment for the organization, hence, gets influenced by the nature of immediate leadership interactions.

We noted in Chapter 1 that the subordinates' intent to leave could not be predicted consistently by LMX theorization. This study too failed to find any significant results of this relationship. The employee withradwal process (or intent) seems to be following some other rules. This does not mean that the nature of immediate leadership does not affect this outcome but independently, probably, it is not sufficient to explain enough variance.

Study 2 Results

In Study 2, intent to leave was dropped and the perception of unit effectiveness was added as a criterion variable. Besides the two dimensions of quality of interaction (PC and AF), attention (AT) and Latitude (LT) were also taken as predictors (LMX was dropped). The results of zero order correlation and stepwise regression are reported in Tables 6.7 and 6.16 respectively.

Extrinsic satisfaction in this study is predicted by perceived contribution, but attention also adds significantly to the variance. Perceived contribution and attention both are the measures of exchanges on actual job situations, since extrinsic satisfaction concerns the satisfaction with external and actual job conditions, the results seem justified. Similarly, intrinsic satisfaction is predicted best by affect but perceived contribution adds significantly to it following the same line of

Table 6.16

Stepwise Regression Results--Members' Quality of Exchange
(Predictors) and their Outcome Variables (Study 2)

Predictors

Criterion	PC	AF	AT	LT
ES				
R	.61	*	.58	*
R^2 change	.03	*	.34	*
Beta	.28[b]	*	.35[a]	*
Order	2	*	1	*
IS				
R	.57	.53	*	*
R^2 change	.04	.28	*	*
Beta	.28[a]	.34[a]	*	*
Order	2	1	*	*
CO				
R	*	*	.66	*
R^2 change	*	*	.43	*
Beta	*	*	.66[a]	*
Order	*	*	1	*
UE				
R	*	*	.74	.76
R^2 change	*	*	.54	.03
Beta	*	*	.48[a]	.31[a]
Order	*	*	1	2

Note. N = 96; a p < .01; b p < .05; PC = Perceived
contribution; AF= Affect; AT = Attention; LT =
Latitude; ES = Extrinsic Satisfaction; IS = Intrinsic
Satisfaction; CO = Commitment; UE = Unit Effectiveness.
* Tolerance level insufficient for further computations.

argument, intrinsic satisfaction is the deeper satisfaction and is likely to have strong affective component. Thus, the prediction of intrinsic satisfaction by affect (mainly) is quite understandable. Perceived contribution too adds to this result positively, which means that for intrinsic satisfaction both the interaction on the jobs with the leader and affect for the leader together operate. Commitment is best predicted by attention. This looks like an exchange situation. The leader gives attention to the member and the member responds with greater commitment. The perception of unit effectiveness is predicted best by attention but latitude also adds significantly to this prediction. Essentially, a unit is perceived to be more effective if the quality of exchange (measured in terms of attention and latitude) is better from the members' perspective.

In essence, thus, the outcomes of extrinsic satisfaction, intrinsic satisfaction, commitment, and unit effectiveness (perceived) are all a positive function of the quality of exchange between a leader and a member. Next, we see the interaction effect of PC and AF.

Interaction Effect of Perceived Contribution and Affect

The interaction effect of PC and AF on the outcome variables (like influence strategies) was tested in Study 1 only. Thus the interaction effects, through hierarchical regression were evaluated for ES, IS, CO, and IL.

The hierarchical regression results are reported in Table

Table 6.17

Hierarchical Regression Results—Members' Outcomes as a Function of the Interaction of their Perceived Contribution and Affect (Study 1)

ES	PC[a]	(.25[a], .11)
	AF	(.15, .01)
	PC x AF	(−.03, .00)
IS	PC	(.23, .12)
	AF	(.13, .01)
	PC x AF	(−.11, .01)
CO	PC	(.23[a], .12)
	AF	(.14, .01)
	PC x AF	(−.10, .01)
IL	PC	(−.12[a], .03)
	AF	(−.10, .01)
	PC x AF	(.03, .00)

Note. N = 152; a p < .01; b p < .05; For abbreviations,   see Table   6.15.   Figures   in   parantheses   are   beta coefficients and R square change, respectively.

6.17 and the corresponding means are reported in Table 6.18. The regression results reveal that the interaction is not significant for any outcome variables. The results are just like that of the influence strategies. The consistent failure of the interaction hypothesis to yield any outcome variables (leaders' influence strategies, members' influence strategies and their other outcome

variables) leads one to doubt the validity and strength of the interaction hypothesis. Finally, we move on to average vs individual test of quality of exchange.

Table 6.18

Mean Scores--Members' Outcome Variables as a Function of the Interaction of Their Perceived Contribution and Affect (Study 1)

	PC		
	AF	Low	High
ES	Low	16.01	17.38
	High	16.17	18.50
IS	Low	17.67	20.54
	High	18.61	21.00
CO	Low	43.45	50.38
	High	45.33	56.67
IL	Low	4.68	4.77
	High	4.89	3.00

Note. Same as Table 6.15

Average vs Individual Quality of Exchange as Predictors

After evaluating the independent and interaction effects of quality of exchange measures, we now turn to the average vs non-average test. The procedure for these outcome variables is the same as for influence strategies.

Table 6.19

Stepwise Regression Results—Members' Perceived Contribution (Group and Individual Scores as Predictors) and Their Outcome Variables (Study 2)

Predictors Criterion	PC(Id)	PC(Gr)
ES		
R	.57	.59
R^2 change	.33	.03
Beta	.49[a]	.18[a]
Order	1	2
IS		
R	.50	*
R^2 change	.25	*
Beta	.50[a]	*
Order	1	*
CO		
R	.59	*
R^2 change	.35	*
Beta	.59[a]	*
Order	1	*
UE		
R	.59	.62
R^2 change	.34	.03
Beta	.68[a]	.18[b]
Order	1	2

Note. $N = 96$; a $p < .01$; b $p < .05$; Gr = Group Scores; Id = Individual Scores. For other abbreviations see Table 6.16. * Tolerance level insufficient for further computations

Table 6.20

Stepwise Regression Results--Members' Affect (Group and Individual Scores as Predictors) and Their Outcome Variables (Study 2)

Predictors	Criterion	AF(Id)	AF(Gr)
ES			
	R	.49	*
	R^2 change	.24	*
	Beta	.49[a]	*
	Order	1	*
IS			
	R	.52	*
	R^2 change	.27	*
	Beta	.52[a]	*
	Order	1	*
CO			
	R	.57	*
	R^2 change	.32	*
	Beta	.57[a]	*
	Order	1	*
UE			
	R	.62	*
	R^2 change	.38	*
	Beta	.62[a]	*
	Order	1	*

Note. $N = 96$; a $p < .01$; b $p < .05$; Gr = Group Scores; Id = Individual Scores. For other abbreviations see Table 6.16. * Tolerance level insufficient for further computations.

Table 6.21

Stepwise Regression Results--Members' Attention (Group and Individual Scores as Predictors) and Their Outcome Variables (Study 2)

Predictors	Criterion	AT(Id)	AT(Gr)
ES			
	R	.58	*
	R^2 change	.34	*
	Beta	.58[a]	*
	Order	1	*
IS			
	R	.47	*
	R^2 change	.22	*
	Beta	.47[a]	*
	Order	1	*
CO			
	R	.66	*
	R^2 change	.43	*
	Beta	.66[a]	*
	Order	1	*
UE			
	R	.74	*
	R^2 change	.54	*
	Beta	.74[a]	*
	Order	1	*

Note. N = 96; a p < .01; b p < .05; Gr = Group Scores; Id = Individual Scores. For other abbreviations see Table 6.16. * Tolerance level insufficient for further computations.

Table 6.22

Stepwise Regression Results--Members' Latitude (Group and Individual Scores as Predictors) and Their Outcome Variables (Study 2)

Predictors Criterion	LT(Id)	LT(Gr)
ES		
R	.55	*
R^2 change	.30	*
Beta	.55[a]	*
Order	1	*
IS		
R	.42	*
R^2 change	.18	*
Beta	.42[a]	*
Order	1	*
CO		
R	.60	*
R^2 change	.36	*
Beta	.60[a]	*
Order	1	*
UE		
R	.71	*
R^2 change	.50	*
Beta	.71[a]	*
Order	1	*

Note. $N = 96$; a $p < .01$; b $p < .05$; Gr = Group Scores; Id = Individual Scores. For other abbreviations see Table 6.16. * Tolerance level insufficient for further computations.

For this purpose, data from Study 2 were taken, as it provided for reasonably big work groups. The group and individual scores of the quality of exchange measures (PC, AF, AT, and LT) were put as predictors in a stepwise hierarchical regression. The regression results for PC, AF, AT, and LT are reported in Tables 6.19, 6.20, 6.21, and 6.22, respectively.

As is evident from the results the individual scores (of all the four QEx measures) emerge as _much_ stronger predictors of different outcomes. All the four outcome variables (ES, IS, CO, and UE) are best predicted by individual scores of all the four predictors (PC, AF, AT and LT). However, the prediction of extrinsic satisfaction and unit effectiveness by perceived contribution creates an equivocal (reject) condition (see Table 6.19), as both the individual and the group scores significantly predict these two outcome variables.

Clearly, there is a strong evidence for individual level predictions as against the group for all the quality of exchange measures. The subordinates' behavioral and affective outcomes are, hence, a function of their individual interaction with the leader.

Comments

As has been mentioned in Chapter 1, whereas relatively softer outcome variables (like satisfaction, commitment etc.) have been predicted by VDL conceptualization, harder measures like employee performance and turnover (intent to leave) have

not been. In the present study, too, the only hard outcome variable (IL) could not be predicted by quality of exchange. However, the relative strength of average and VDL theorizations, for predicting intent to leave could not be tested as data in Study 1 were not sufficient to conduct this analysis. Vecchio, Griffeth, and Hom's (1986) explanation for the failure of QEx to predict IL seems specious. They say, just as Mobley and his associates (Mobley, 1977; Mobley, Griffeth, Hand, & Meglino, 1979) have identified a series of intermediate processes (affective and cognitive) between employee perception and turnover, a similar (though unidentified) process might mediate quality of exchange and intent to leave (or turnover). We have already said that QEx when studied in conjunction with other processes might predict employee turnover or their intent to leave. Thus, the need is to identify these intermediate processes and the connections between them. The results, however, reveal that the other outcome variables for the members do get influenced by their quality of exchange.

The role and importance of unit differentiation in studying subordinates' behavior and feelings cannot be denied. The need now is to incorporate this fact with other important organizational processes to have a complete understanding of employees attitudes, feelings, and behaviors.

Chapter 7

Summary and Conclusions

An Overview

This chapter is an attempt to provide an overall understanding into the phenomenon of "quality of interaction." It specifically aims at integrating the various analyses performed in the last three chapters. Findings are discussed in the global perspective as well as in the Indian perspective. While doing so, implications of the findings are discussed, potential limitations of the two surveys are presented, and recommendations for future research are highlighted.

The first part of the chapter deals with the integration of results. Findings are discussed in the first three sections. The preponderance of hierarchy in the Indian value system leads to unit differentiation. The nature of exchanges—the inputs and the outputs—in the Indian setting too are discussed.

The next part deals with the implications of the present work. In the first section, the implications for the researchers are discussed. These implications draw heavily from the discussion in the last part. Essentially the focus is on exploring and understanding VDL in the Indian context. It is felt that though the process of unit differentiation is universal, the operating factors might be different for different cultures. In the next section of this part, the implications for

leadership training are discussed. Essentially, the need to incorporate the fact of unit differentiation in different training techniques is emphasized.

Finally, in the last part of the chapter, some potential limitations of the present studies are presented.

INTEGRATION OF FINDINGS

In chapter 1, it was mentioned that there were three broad aims of the present work--(i) to develop a comprehensive measure of the interactions between a leader and a member, (ii) to identify relevant antecedent factors that determine the quality of this interaction, and (iii) to see the impact (consequences) of the quality of interaction on the work dynamics (influence tactics) of both leaders and members, and the job related behaviors and attitudes of the subordinates. The findings of these three objectives are reported in chapters 4, 5, and 6, respectively. We will take up the findings related to the three aims separately and try to discuss them in the Indian context.

Nature of Quality of Interaction

Throughout the manuscript, we have been contending for a dyadic approach to study leadership. In chapter 4, a two-dimensional measure of quality of interaction was developed. We have discussed the two dimensions--perceived contribution and affect--in that chapter. It was also noted that the work unit under a leader gets differentiated, wherein the differences are

reported both by the leader and the members. In the Indian context, it is worthwhile to note that, broadly, the Indian (equated with Hindu) social system has the concept of hierarchy inherent in it (Roland, 1980) and, in general, the Indian social system (culture) is structured in terms of superior-subordinate relationships (Kothari, 1970), so much so, that even peers and friends are ranked in a hierachical order (Sinha, 1990). This means that Indians, by and large, have a tendency to grade, divide, and subdivide. The rule of hierarchy follows everywhere even in a work-unit under a leader. In chapter 1, we pointed out that unit differentiation under a leader is imperative given the transience of the environment. This point is not refuted at all from the global organizational perspective. What we are trying here is to understand and explain the results from the organizational members' perspective. Our analysis would mean that even if the environment was static, the Indian manager will differentiate between subordinates, given the social values. The effect of transient environment gets compounded when such values are dominant. Later we will see how these prevalent values also act as the determinants of unit differentiation (hierarchy). Further, it is interesting to note that the differentiation (hierarchy) is maintained through "affective reciprocity" (Roland, 1984). The reciprocal nature of _affect_ in a leader member dyad, too, was established in Chapter 4. We do not mean to say that a leader-member dyad is a microcosm of broad and global social phenomena, but the influence of the latter on the

former cannot be denied. Kumar and Singh (1976) have given two dimensions--personal-impersonal, own-others--to understand the construct system of an Indian manager. Interestingly, affective reciprocity exists for people who are in the own and personal quadrant. The relationship with these IN-Group members is characterized with reciprocal affection (Sinha, 1990). On the other hand, relationship with impersonal-others is devoid of this affect. In Chapters 1 and 4, it was mentioned that perceived contribution and affect both are high for higher quality dyads where the collaboration is more.

Hence, the emergence of perceived contribution and affect in the Indian context are in line with the above mentioned arguments. Thus, we see that the Indian milieu provides us with a readymade pattern of differentiation with perceived contribution and affect as the key determinants of this differentiation.

Though the theme of hierarchy in the Indian value system is much recognized, it is surprising to note that the concept of hierarchy within a work group has not been given enough attention.

It was mentioned in Chapter 1 that unit differentiation occurs because of differential exhanges between a leader and different members. In the Indian context, Sinha (1990, p. 39) notes that in the IN-Groups (high quality dyads),

> the superiors are expected to have warmth, affection, care, nurturance, etc. for the subordinates or juniors who must reciprocate by being loyal, trustworthy, respectful, dependent, etc.

The exchanges are clear. But these are the exchanges that typify the cultural mien. In actual work settings, this exchange of affection and deference takes place through real job problems and through role episodes (see Chapter 1, Figure 1.1). So, this is the nature of unit differentiation in Indian organizations. Next, we shift our attention to the antecedents of this differentiation.

Antecedents of Quality of Interaction

In the last section, we noticed that it is not only the environmental contingencies that force a unit differentiation, but also the cultural values that work towards this differentiation. In Chapter 5, we identified some antecedents of quality of interaction (exchange). Essentially, we talked of three interactions—personal orientations with personal orientations, leadership orientations with leadership orientations, personal orientations with perceived climate. It was noted that whereas the first interaction did not yield significant results, the last two did. Although, the two interactions did yield significant results and we have discussed those results in Chapter 5, the antecedents have to be identified at a deeper grass-root level. Indian reality needs to be identified at this stage. No doubt, the person-environment interactions are important, an understanding of the Indian psyche and Indian values should be a more fruitful attempt. In the present work, we have established that the personal

orientations of the two parties (in general) are not really very important and they should be left alone. The personal orientation of the leader is important only so far as it sets a particular environment for the subordinates to work in. The subordinates choose themselves in or out of such situations depending upon their own personal orientations.

We failed to identify any antecedent conditions that might determine the quality of interaction from the leaders' perspective. According to our model in Chapter 1, ideally a leader should choose a competent (efficient and effective) subordinate to collaborate on unstructured tasks. The leaders will do so if their prime concern is to get the job done. The selection of people, in such cases, into In- and OUT-Groups will follow a rational process wherein the competence of the subordinates is a valued resource. We noted, however, that the Indian social values too work towards differentiation and when the aim of the leader is to differentiate for personal benefits (not organizational), obviously the criteria for choosing subordinates (into IN- and OUT-Groups) will be different. As Sinha (1990, p. 36) notes, in general,

> family, relatives, friends, coworkers, caste men, persons speaking the same language, belonging to same area or religion or the country may be the ingroups.

Clearly, selection of subordinates in the In-Group on these criteria, overlooks the organizational goals totally. Thus though the fact of unit differentiation is accepted, it is the antecedent conditions that will predict the relative

effectiveness or ineffectiveness of this differentiation.

In Chapter 1, an ideal situation and antecedents of unit differentiation was identified. As mentioned earlier, these antecedent conditions become pathological if the concerns of both the leaders and the members are not organizational. But irrespective of the antecedents, the process of selecting subordinates into IN- and OUT-Groups is the same (through role development). In a pathological case, the members are chosen (into In/OUT-Group) on essentially demographic characteristics (like caste, religion, region, etc.) straightaway, and these people have a major share in strategic decision-making and other vital organizational processes. Obviously, this will have direct implications for organizational effectiveness. The need, hence, is to identify these variables and relate them to the effectiveness of organization, in general, and the leaders, in particular.

Consequences of Quality of Interaction

In Chapter 6, the consequences of the quality of interaction were discussed. The results were discussed under two heads—social influence processes and other outcome variables.

Leadership has been conceptualized as a reciprocal influence process. In this light, the identification of actual influence processes becomes a must. In line with our conceptualization of unit differentiation, the influence processes need to be studied at the dyadic level in terms of leaders' interaction with

individual subordinates. The use of influence tactics, both from the leader and the member perspectives, shows variation within a work-group.

The use of personalized exchange by both (leader and member) to influence each other has special relevance in the Indian context. Preference for personalized relationship is a dominant value for Indians. Hence, the use of personal relationships is a valued outcome. The use of this tactic, hence, for the IN-Group members by the leader and vice versa stands validated. The use of other tactics in the IN- and OUT-Groups has already been discussed. Thus, leadership and power dynamics need to be studied at the work-group level with a focus on within-group variations. The power play within and between work-groups will help in understanding organizational dynamics.

Further, the attitudes, feelings, and behaviors of the members in an organization are closely linked with their leader, specifically, with their individual interaction with the leader. As Sinha (1990) notes that the group norms and values for the IN-Group members are often different for and sometimes opposite to that of the OUT-Group members. Clearly, a perception of this difference by the members leads to differing experiences. Since, motivation, satisfaction, commitment etc. of the employees are a reflection of the overall organizational effectiveness, it is a must that strong predictive correlates of these variables be identified and explicated. Mostly, leadership research (in the average framework) has shown mixed and inconclusive results.

Although the research concerning the VDL approach is limited, unit-differentiation seems to be a more practical and realistic understanding.

The need hence is to study dyadic exchanges in the Indian setting. In the next section, we briefly present an integrated framework based on the last three sections. This may be taken up in the future research.

VDL in the Indian Setting

In Indian organizations, we see that it is not only the demands placed on the organizations (as stated in Chapter 1) that lead to the differentiation of work-unit under a leader, but also the social values of the people in organizations work towards this differentiation. Undoubtedly, the industrial activity in India has been rapidly expanding with the importation of Western technology and know-how. This places extra developmental demands on the organization (in line with our argument in Chapter 1), which makes unit differentiation a must. These organizations are made up of people who also believe in hierarchical differentiation (of the work units). But the aims of the two are usually not the same. We have large technical organizations modeled after Western lines but the people have Indian values. Thus, the need is to identify the points of similarity and differences between the two. An exhaustive search of these variables will throw light on the actual functioning of these organizations.

Further, we mentioned that there are unique exchanges between the leader and different members. The nature of exchanges in the Indian setting is of immense importance in understanding the quality of interaction in leader-member dyads. Sinha (1990) identifies the nature of exchanges in terms of sneh-Shradha (Affection-Deference). It is interesting to note that though the so-called In-Group members enjoy a special elevated status, the status quo is maintained even in high quality dyads. Despite the fact that leaders and members are interdependent for getting the work done, the exchange terms for the two are supposed to be different. Whereas the leader gives warmth, support, care, and nurturance, the subordinates respond by being respectful, loyal, and dependent. Future studies can focus on these dimensions of exchanges to better understand the nature of dyadic interactions.

IMPLICATIONS

Issues for the Researchers

In the last part, we tried to evaluate VDL in the Indian context. The discussion leads to an identification of different antecedent or contingency factors and exchange processes. Further, researchers can attempt to combine the average theorizations with dyadic ones. The general orientations of the leaders (work or relationship) reflect their style of working. These styles can define the leaders' preferred antecedent conditions. Thus, whereas a work-oriented leader might look for

job related competence in subordinates, a relationship-oriented leader will look for interpersonal qualities. Essentially, if leadership research is to yield some relevant insights, the level of analysis has to be given due importance.

Further, the VDL model needs to be expanded. As was mentioned in Chapter 1, VDL has been extended in some contexts. Although the extensions seem to be theoretically sound, there is little empirical attempt to validate the extension. Such an extension might provide us with linkages in understanding the other "hard" outcomes of the employees (e.g., intent to leave).

Once the fact of unit differentiation is acknowledged, it has some special significance for practitioners and managers.

Implications for the Managers and Practitioners

It has been recognized that educating people in the right way helps in the development of leadership skills. This fact has implications for leadership training. The relevance, effectiveness, and importance of leadership training is well established. We will take up different training techniques and see how VDL can be incorporated in them. But, before that it has to be deciphered whether unit differentiation is desirable in the interest of all the parties (the organization and its members). Since leader-member interactions are related to employee satisfaction, commitment, and other behaviors, it is desirable that these dyadic interactions be such that they improve satisfaction, etc. of the subordinates. In brief, programs

designed to improve these dyadic interactions will lead to better outcomes for members with low quality of interaction. This concept can be incorporated in different training procedures, both on- and off-the-jobs.

To begin with, the managers (as leaders) have to be made aware of this fact of unit differentiation through lectures and discussions. Providing the relevant information will stimulate relevant thinking in managers.

Role playing is yet another technique of training in which the fact of unit differentiation can be incorporated. Through this process leaders and managers can be made aware of this fact (role playing as diagnostic process). Group discussion following the role playing might help in a proper diagnosis of exchanges. Not only the role players but the other trainee observers might also gain from this insight. The concept of dyadic exchanges can be introduced through the simulation techniques of in-basket training and games. Sensitivity training should be an important tool especially in the Indian setting, because affect dimension is likely to be very strong. Sensitivity training can be aimed at greater sensitivity towards subordinates with low LMX. The trainees' (leaders') attitudes, perceptions, and behavior can be changed in consonance with our theory of dyadic exchanges. Similarly, this concept can be incorporated in behavior modeling techniques, as well.

There has been very little use of this theory in leadership training. This is probably because the theory is relatively

recent and has seen little empirical work. The effectiveness of leadership intervention based on the LMX or VDL model is reported by Scandura and Graen (1984). They reported that such an intervention improved the job satisfaction and leadership satisfaction of the subordinates who had low LMX before intervention. The need, therefore, is to recognise this vital aspect of leadership and incorporate it in training programs for better results.

LIMITATIONS

The present work is not devoid of limitations. The first emanates from the nature of the work. We are working with a developmental concept (quality of exchange) and the best way to study it is through a longitudinal study. This work takes the freeze snap-shot view at the time of researcher's entry into the organizations. However, the stability of these exchanges over time has been reported (e.g., Wakabayashi & Graen, 1984; Wakabayashi et al., 1988). Thus, the results of cross-sectional studies of this kind can also provide useful insights.

The second limitation is concerned with the two samples employed in the two studies. The sample in Study 1 was a much larger sample (N = 219) as compared to the sample in Study 2 (N = 122). Thus, all those hypotheses that were tested in Study 2 only (though few) can be validated through larger and heterogeneous samples. However, the sample size in Study 2 too is not so small as the focus is on dyadic interactions, and the

preferred anslysis is based on a continuous scale where each and every score is of importance.

The third limitation deals with the nature of outcome variables taken in the present work. The hard outcome variables like performance, productivity, turnover, etc. were not incorporated in the study. Intent to leave came closest to this objective.

Fourthly, we have conducted no analysis to study the proposed relationships in terms of the nature of the organizations studied. Future studies can explore the nature of dyadic exchange in different organizations in terms of ownership (public or private) and financial status (running in profit or losses), etc. It should be noted, however, that we employed four diverse organizations in Study 1 and just one large manufacturing organization in Study 2. The comparable results were found to be almost identical in both the studies.

Finally, one limitation of the study is it's lack of major focus on Indian reality. The impact of Indian values and work culture on unit differentiation has not been explored in the present work. This is because these values and orientations need to be operationalized in work settings for the measures to be incorporated in a work related to organizational behavior. All the same, problems for future work are presented in this chapter that can be taken up in subsequent studies.

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INTERACTING WITH
PEOPLE AT WORK

The fundamental aim of this work is to study the underlying dynamics of the interaction of people at work. Your frank and sincere replies will help us understand your organization and individual dynamics and suggest some ways which might make your organization a better place to work in.

As with any professional social science research of this type, only general findings will be reported. Individual anonymity is completely guaranteed. No one other than the researcher will ever see any of your individual responses. DO NOT WRITE YOUR NAME OR SIGN ANYWHERE ON THIS BOOKLET.

You will find that it does not take long to complete the questionnaire. Thank you very much for your cooperation.

<div align="right">

Kanika Tandon
Research Scholar

</div>

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SECTION I -- <u>Relationship</u>

1 (PAL).   In organizations individuals work with different
people.   Working with others is a must to achieve the
organizational goal(s).   In this process, the individual may
interact differently with different people and with <u>one at a
time</u>. We want you to evaluate your interaction with-----------
in terms of the following questions. Please read each of the
questions carefully and judge the <u>degree</u> to which it is true to
the interaction between the <u>two</u> of you. Select the number of
your choice (given below) and put it to the left of the statement
in the space provided.

```
---------------------------------
| Very much        ... 7 |
| A good deal      ... 6 |
| Quite a bit      ... 5 |
| Somewhat         ... 4 |
| A little         ... 3 |
| Very little      ... 2 |
| Not at all       ... 1 |
---------------------------------
```

--   (01L)   How much is his/her work activity valuable to other
             members of your group?

--   (02P)   How much time does he/she spend on the jobs that are
             to be done together by you and him/her?

--   (03A)   How much affection do you have for each other?

--   (04P)   How much responsibility does he/she take for the jobs
             that are to be done jointly by you and him/her?

--   (05L)   How much help does he/she readily get from other
             group members in accomplishing the group tasks?

--   (06P)   How much is his/her contribution in terms of the
             viable solutions to the problems that are to be
             solved together by you and him/her?

--   (07A)   How much do you interact with each other off the job?

--   (08<u>L</u>)   How much is his/her work activity resisted by others?

--   (09P)   How much is his/her contribution to the quality of
             solutions on the jobs that are to be done together by
             you and him/her?

-- (10A) How much liking do you have for each other?

-- (11P) How much effort does he/she put in the jobs that are to be done together by you and him/her?

-- (12L) How efficient is he/she considered on his/her job by other members of your group?

-- (13A) How much do you help each other in personal matters?

-- (14L) How much is he/she liked by other members of your group?

-- (15P) How much is his/her contribution to the quantity of solutions on the jobs that are to be done together by you and him/her?

-- (16A) How much advice do you seek from each other on personal problems?

-- (17P) How efficient is his/her contribution on the jobs for which the two of you work together?

-- (18L) How much is his/her work activity supported by other members of your group?

-- (19A) How much do you discuss your personal matters with each other?

-- (20L) How much is his/her work activity valued by other members of your group?

-- (21P) How useful is his/her effort on the jobs that are to be done together by you and him/her?

-- (22A) How much interest do you take in solving each other's problem?

-- (23A) How much importance do you attach to each other's advice on personal matters?

-- (24P) How much initiative does he/she take in solving the probmlems to be done together by you and him/her?

2 (INF). Below are described various ways of obtaining information about how you go about changing the mind (or opinion) of ------------ so that he/she agrees with you. Please describe each statement, on a 7-point scale (given below), as to how <u>frequently</u> you use each of the following items to influence him/her at work. Describe the statements in terms of what you do, <u>not</u> what you would like to do.

```
-----------------------------------
| Never              ...  1 |
| Almost Never       ...  2 |
| Seldom             ...  3 |
| Sometimes          ...  4 |
| Usually            ...  5 |
| Almost always      ...  6 |
| Always             ...  7 |
-----------------------------------
```

-- (01C) Call a staff meeting to back up your request.

-- (02A) Repeatedly remind him/her about what you want.

-- (03I) Praise him/her with superlatives.

-- (04W) Keep a straight face, conceal your emotions.

-- (05S) Tell him/her that you have a lot of experience with such matters.

-- (06S) Straightaway ask him/her to do what you want.

-- (07M) Get your way by making him/her feel that it was his/her idea.

-- (08P) Repeatedly ask him/her until he/she gives in.

-- (09S) Show your knowledge of technical issue.

-- (10R) Convince him/her by telling the urgency and utility of the issue at hand.

-- (11E) Offer an exchange of favor.

-- (12W) Clam up (become silent).

-- (13P) Do personal favors for him/her.

-- (14U) Appeal formally to higher ups to back your request.

-- (15M) Distort or lie about reasons why he/she should do what you want.

-- (16I) Ask him/her to do some task in a polite way.

-- (17M) At times withhold some crucial information from him/her.

-- (18C) Find others elsewhere in the organization who support your activities.

-- (19I) Make him/her feel important.

-- (20U) Obtain informal support of higher ups.

-- (21R) Sometimes tell him/her the reasons for making the request.

-- (22P) Help him/her even in personal matters.

-- (23W) Back down quickly.

-- (24E) Remind him/her of past favors you did for him/her.

-- (25A) Set a time deadline to do what you ask.

-- (26C) Bring some friends along to back your request.

-- (27I) Even when you know you would not use his/her advice, you consult him/her.

-- (28P) Repeatedly persuade him/her to comply with your arguments as they are the need of the time.

-- (29M) Keep a record of his/her omissions and commissions.

-- (30U) Get the support of some higher up to back your request.

-- (31R) Tell exactly why you need his/her help.

-- (32I) Use the words that make him/her feel good.

-- (33P) At times try to persuade him/her that your way is the best.

-- (34M) Present your ideas in a disguised way.

-- (35C) Get everyone else to agree with you before you make the request.

-- (36E) Remind him/her how hard you had worked and it would only be fair for him/her to help you now.

-- (37P) Help him/her out of your way when he/she is in need of help.

-- (38R) Tell him/her the reasons why your plan is the best.

-- (39U) Refer the matter to higher authority if the situation so demands.

-- (40S) Influence him/her with your competence.

-- (41R) Argue your points logically.

-- (42S) At times show your knowledge of the specific issue.

-- (43W) Do nothing.

-- (44E) Offer some personal sacrifice in exchange (e.g., doing part of his/her or others job, etc.).

-- (45A) Tell him/her exactly what is it that you want.

-- (46P) Get your way by convincing that your way is the best way.

-- (47P) Go on asking persistently till he does what you want.

3   (LMX).   Following questions relate to your immediate supervisor.   Please answer them by ticking one of the four alternatives given with each question.   Tick the alternative that describes best your relationship with your immediate supervisor.

(1)   How flexible do you believe your supervisor is about evolving change in your job?

       -- (4)   Supervisor is enthused about change.
       -- (3)   Supervisor is lukewarm to change.
       -- (2)   Supervisor sees little need to change.
       -- (1)   Supervisor sees no need to change.

(2)   Regardless of how much formal organizational authority your supervisor has built into his/her position, what are the chances that he/she would be personally inclined to use his/her power to help you solve problems in your work?

       -- (4)   He certainly would.
       -- (3)   Probably would.
       -- (2)   Might or might not.
       -- (1)   No.

(3)   To what extent you can count on your supervisor to "bail you out", at his/her expense, when you really need him/her?

       -- (4)   Certainly would.
       -- (3)   Probably.
       -- (2)   Might or might not.
       -- (1)   No.

(4) How often do you take suggestions regarding your work to your supervisor?

    -- (4)   Almost always.
    -- (3)   Usually.
    -- (2)   Seldom.
    -- (1)   Never.

(5) How would you characterize your working relationship with your supervisor?

    -- (4)   Extremely effective.
    -- (3)   Better than average.
    -- (2)   About average.
    -- (1)   Less than average.

SECTION II -- PAIR

Below are listed 20 statements that describe various things people do or try to do on their jobs. Please rate on a 7-point scale given below, how **frequently** each of the statements **fits** your action, and write the number of your choice on the small line to the left of the statement. Remember: There are no right or wrong answers. Please answer all questions frankly.

Never	...	1
Almost never	...	2
Seldom	...	3
Sometimes	...	4
Usually	...	5
Almost always	...	6
Always	...	7

-- (01I) I consider myself a "team player" at work.

-- (02I) I go my own way at work, regardless of the opinion of others.

-- (03P) I strive to be "in command" when I am working in a group.

-- (04R) I express my disagreements with others openly.

-- (05I) In my work assignments, I try to be my own boss.

-- (06P) I seek an active role in the leadership of a group.

-- (07I) I disregard rules and regulations that hamper my personal freedom.

-- (08I) I try my best to work alone on a job.

-- (09R) I find myself talking to those around me about non-business related matters.

-- (10A) I try very hard to improve on my past performance at work.

-- (11A) I try to avoid any added responsibilities on my job.

-- (12R) I prefer to do my own work and let others do theirs.

-- (13R) I pay a good deal of attention to the feelings of others at work.

-- (14A) I do my best work when job assignments are fairly difficult.

-- (15P) I avoid trying to influence those around me to see things my way.

-- (16A) I try to perform better than my coworkers.

-- (17P) I strive to gain more control over the events around me at work.

-- (18A) I take moderate risks and stick my neck out to get ahead at work.

-- (19D) I find myself organizing and directing the activities of others.

-- (20R) When I have a choice, I try to work in a group instead of by myself.

SECTION III -- CL

Following set of statements is concerned with your perceptions and observations about the organization in which you are presently working. Please read each of them carefully and judge the extent to which you consider it to be true to your organization, and write the number of your choice in the space provided to the left of the statement.

```
-------------------------------------------
: Almost no extent            ... 1 :
: To a very small extent      ... 2 :
: To a small extent           ... 3 :
: To some extent              ... 4 :
: To a considerable extent    ... 5 :
: To a great extent           ... 6 :
: To a very great extent      ... 7 :
-------------------------------------------
```

—— (01R) This organization encourages its employees to discuss non-business related, personal problems.

—— (02A) In this organization, there is a feeling of pressure to continually improve individual and group performance.

—— (03I) In this organization, control is assigned so that I have authority within my work area.

—— (04P) This organization strives to be "in command" while interacting with other organizations.

—— (05R) This organization prefers group to individual projects and provides opportunities for its employees to interact among themselves.

—— (06R) This organization pays a good deal of attention to the feelings of its employees.

—— (07A) This organization stimulates and approves of innovation and experimentation.

—— (08A) In this organization, we set fairly high standards for performance.

—— (09P) This organization prefers to be its own boss, even where it needs assistance, or where a joint effort is required.

—— (10I) In this organization, it is up to us to decide how our job should best be done.

—— (11I) This organization wants us to be "team players" rather than "independant workers."

—— (12P) Status symbols are especially important for this organization and it uses them to gain influence over others.

—— (13R) In this organization, the interpersonal communications among executives and managers are free and open.

-- (14<u>A</u>) This organization discourages taking of increased responsibilities by its members.

-- (15A) In this organization, we are free to set our own performance goal.

-- (16I) In this organization, there are opportunities for independent thoughts and actions on our jobs.

-- (17P) This organization directs and organizes the activities of its members.

-- (18I) In this organization, we have a great deal of freedom to decide how we do our job.

-- (19R) There is a high degree of interpersonal trust among managers and executives in this organization.

-- (20P) This organization provides a lot of power and control to upper level management.

SECTION IV -- <u>Output</u>

1 (SAT). Please indicate how <u>satisfied</u> you are on a 7-point scale with each of the following aspects of your job. Read each item carefully and put the number of your choice in the space provided to the left of the item.

```
---------------------------------------
! Very dissatisfied       ...   1 !
! Dissatisfied            ...   2 !
! Slightly dissatisfied   ...   3 !
! Neutral                 ...   4 !
! Slightly satisfied      ...   5 !
! Satisfied               ...   6 !
! Very satisfied          ...   7 !
---------------------------------------
```

<u>HOW SATISFIED ARE YOU WITH</u>?

-- (01) The fringe benefits you receive.

-- (02) The friendliness of the people you work with.

-- (03) The amount of freedom you have on your job.

-- (04) The chance you have to learn new things.

-- (05) The respect you receive from the people you work with.

-- (06) The amount of pay you get.

-- (07) The chances you have to do something that makes you feel good about yourself as a person.

-- (08) The way you are treated by the people you work with.

-- (09) The chances (times) you have to take part in making decisions.

-- (10) The amount of job security you have.

-- (11) The amount of personal growth and development you get in doing your job.

-- (12) The feeling of worthwhile accomplishment you get in doing your job.

-- (13) How secure things look for you in the future in this organization.

-- (14) The amount of challenge in your job.

-- (15) The chance to get to know other people while on the job.

-- (16) The chances for advancement on your job.

2 (COM). Listed below are a series of statements that represent possible feelings that individuals might have for organizations for which they work. With respect to your own feelings about the particular organization for which you are now working, please indicate the degree of your agreement or disagreement with each statement.

Write the number of your choice in the blank beside each statement, based on the following scale.

```
---------------------------------------------
| Strongly disagree            ...   1 |
| Moderately disagree          ...   2 |
| Slightly disagree            ...   3 |
| Neither agree nor disagree   ...   4 |
| Slightly agree               ...   5 |
| Moderately agree             ...   6 |
| Strongly agree               ...   7 |
---------------------------------------------
```

-- (1) I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.

-- (2) I talk up this organization to my friends as a great organization to work for.

-- (3) I would accept almost any type of job assignment in order to keep working for this organization.

-- (4) I find that my values and organization's values are very similar.

-- (5) I am proud to tell others that I am a part of this organization.

-- (6) I could just as well be working for a different organization as long as the type of work were similar.

-- (7) This organization really inspires the very best in me in the way of job performance.

-- (8) Often, I find it difficult to agree with this organization's policies on important matters relating to its employees.

-- (9) I really care about the fate of this organization.

SECTION V -- Personal Data

(01) Your age (Please write in) _____ years.

(02) Educational Qualification (Degree, Diploma, etc.) _____.

_____.

(03) Your job title or designation _____.

(04) For how many years have you been with your present organization? _____.

(05) For how many years have you been working in your persent position? _____.

(06) How many promotions have you received in your professional career? _____.

INTERACTING WITH
PEOPLE AT WORK

The fundamental aim of this work is to study the underlying dynamics of the interaction of people at work. Your frank and sincere replies will help us understand your organization and individual dynamics and suggest some ways which might make your organization a better place to work in.

As with any social science research of this type, only general findings will be reported. Individual <u>anonymity</u> is completely quaranteed.

DO NOT WRITE YOUR NAME OR SIGN ANYWHERE ON THIS BOOKLET. You will find that it does not take long to complete the questionnaire. Thank you very much for your cooperation.

<div align="right">

Kanika Tandon
Research Scholar

</div>

Department of Humanities and Social Sciences
Indian Institute of Technology
Kanpur 208 016 (INDIA)

SECTION I -- PAI

Below are listed 15 statements that describe various things people do or try to do on their jobs. Please rate on a 7-point scale given below, how <u>frequently</u> each of the statements <u>fits</u> your action, and write the number of your choice on the small line to the left of the statement. Remember: There are no right or wrong answers. Please answer all questions frankly.

Never	... 1
Almost never	... 2
Seldom	... 3
Sometimes	... 4
Usually	... 5
Almost always	... 6
Always	... 7

-- (01I)   I go my own way at work, regardless of the opinion of others.

-- (02P)   I strive to be "in command" when I am working in a group.

-- (03I)   In my work assignments, I try to be my own boss.

-- (04P)   I seek an active role in the leadership of a group.

-- (05I)   I disregard rules and regulations that hamper my personal freedom.

-- (06I)   I try my best to work alone on a job.

-- (07A)   I try very hard to improve on my past performance at work.

-- (08<u>A</u>)   I try to avoid any added responsibilities on my job.

-- (09A)   I do my best work when job assignments are fairly difficult.

-- (10A)   I try to perform better than my coworkers.

-- (11Ā)   I strive to gain more control over the events around me at work.

SECTION II -- <u>CL</u>

Following set of statements is concerned with your perceptions and observations about the organization in which you are presently working. Please read each of them carefully and judge the <u>extent</u> to which you consider it to be true to your organization, and write the number of your choice in the space provided to the left of the statement.

```
Almost no extent          ... 1
To a very small extent    ... 2
To a small extent         ... 3
To some extent            ... 4
To a considerable extent  ... 5
To a great extent         ... 6
To a very great extent    ... 7
```

-- (01A)   In this organization, there is a feeling of pressure to continually improve individual and group performance.

-- (02A)   This organization stimulates and approves of innovation and experimentation.

-- (03A)   In this organization, we set fairly high standards for performance.

-- (04P)   This organization prefers to be its own boss, even where it needs assistance, or where a joint effort is required.

-- (05I)   In this organization, it is up to us to decide how our job should best be done.

-- (96P)   Status symbols are especially important for this organization and it uses them to gain influence over others.

-- (07I)   In this organization, we are free to set our own performance goals.

-- (08I)   In this organization, there are opportunities for independent thoughts and actions on our jobs.

-- (09I)   In this organization, we have a great deal of freedom to decide how we do our job.

-- (10P)   This organization provides a lot of power and control to upper level management.

SECTION III -- Personal Data

(01) Your age (Please write in) _____ years.

(02) Educational Qualifications (Degree, Diploma, etc.) _____.

_____.

(03) Your job title or designation _____.

(04) For how many years have you been with your present organization? _____.

(05) For how many years have you been working in your present position? _____.

(06) How many promotions have you received in your professional career? _____.

-- very much   -- A good deal   -- Quite a bit
-- some what   -- A little   -- Very little
-- Not at all

(07) What is your earned monthly income? (including salary, allowances, etc.). Check one of the following:

-- 1. Below Rs.3,000/-
-- 2. Between Rs.3,001/- and Rs.3,500/-
-- 3. Between Rs.3,501/- and Rs.4,000/-
-- 4. Between Rs.4,001/- and Rs.4,500/-
-- 5. Between Rs.4,501/- and Rs.5,000/-
-- 6. Over Rs.5000/-

SECTION IV -- STYLE

1 (LS). This scale is meant to find out the different ways a manager acts, feels, or prefers. Thus the following statements are about your behavior. Please read each of them carefully and decide how frequently it is true for you. Select the number of your choice, as given below, and put it on the small line to the left of the statement.

Never	... 1
Almost never	... 2
Seldom	... 3
Sometimes	... 4
Usually	... 5
Almost always	... 6
Always	... 7

-- (01P)   I often consult my subordinates.

-- (02N)   I take personal interest in the promotion of th
           subordinates who work hard.

-- (03F)   I keep important information to myself.

-- (04P)   I let my subordinates solve a problem jointly.

-- (05N)   I encourage my subordinates to assume grea
           responsibility on job as they become more experience

-- (06P)   I treat my subordinates as equal.

-- (07P)   I go by the joint decisions of my group.

-- (08F)   I think that not all employees are capable of being
           officer.

-- (09F)   I am quite confident of being right in maki
           decisions.

-- (10N)   I openly favor those who work hard.

-- (11F)   I keep an eye on what my subordinates do.

-- (12N)   I go out of my way to help those subordinates w
           maintain high standard of performance.

-- (13P)   I make my subordinates feel free even to disagree wi
           me.

-- (14N)   I feel good when I find my subordinates eager to learr

-- (15F)   I demand my subordinates to do what I want.

Once again thank you for your help.

SECTION IV -- (PS)

Listed below are three descriptions concerning the behavior of
manager.

Description A : He/she emphasizes obedience and respect fo
               authority; makes the decisions single-handedly
               is very confident of his/her decisions bein
               right; and keeps a close eye on his/he
               subordinates.

<u>Description B</u> : He/she is a task-and-efficiency-oriented manager; is a realist and wants to get the job done anyhow; and likes and encourages those subordinates who work hard.

<u>Description C</u> : He/she is people-oriented and encourages team work. Though he/she is quite concerned with efficiency, he/she cares more for the subordinates and helps them develop their individual worth.

Compare each pair of descriptions according to your preference. Allocate 3 points between the two alternative descriptions in each pair. Base your point allocation on your judgement of each description's relative preference to you. Thus, allocate the point between the first description and the second description (in each pair) based on the degree of your preference in the following fashion. Thus if you prefer A much more than B, then allocate 3 to A and 0 to B (as shown in box d). Similarly, if you prefer A slightly more than B, then assign 2 to A and 1 to B (see box C). And so on.

A	0
B	3

(a)

A	1
B	2

(b)

A	2
B	1

(c)

A	3
B	0

(d)

Be sure that the numbers assigned to each pair add up to 3.

1)   Compare A & B descriptions

A	--
B	--

2)   Compare A & C descriptions

A	--
C	--

3)   Compare B & C descriptions

B	--
C	--

SECTION V -- <u>IR</u>

1 (AT).   Following questions relate to your interaction with your <u>immediate</u> <u>superior</u>. Please read each of them carefully and judge the degree to which it is present in your relationship with him/her, according to the scale given below. Write the numberof your choice in the space provided to the left of the statement.

```
┌─────────────────────────────────────┐
│ Almost none        ... 1            │
│ A little           ... 2            │
│ A fair amount      ... 3            │
│ Quite a bit        ... 4            │
│ A great deal       ... 5            │
└─────────────────────────────────────┘
```

-- (1)   How much information does he/she give to you about his/her assessment of your job performance?

-- (2)   How much attention does he/she give to your feelings and needs?

-- (3)   How much information does he/she give to you about the current and future state of your unit/division and your position in the unit?

-- (4)   How much support does he/she give to your action and ideas?

-- (5)   How much serious consideration does he/she give to your suggestions and ideas?

2 (LT). Now rate the next five questions according to the following scale:

```
┌─────────────────────────────────────┐
│ No chance          ... 1            │
│ Probably not       ... 2            │
│ Probably           ... 3            │
│ Certaintly         ... 4            │
└─────────────────────────────────────┘
```

-- (1)   In general, would he/she let you implement the changes that you wanted to make in your job?

-- (2)   Wopuld he/she tend to let you implement changes in your job if you had previously spoken to him/her about those changes?

-- (3)   Would he/she tend to let you implement changes in your job even if you had not previously spoken to him/her about those changes?

-- (4)   Would he/she tend to let you implement changes in your job as long as they had little impact on how he/she did his/her own job?

-- (5)   Would he/she tend to let you implement changes in your job even if those changes had a major impact on how he/she did his/her own job?

SECTION VI -- Relationship

1 (PA).   In organizations individuals work with different people. Working with others is a must to achieve the organizational goal(s). In this process, the individual may interact differently with different people and with <u>one at a time</u>. We want you to evaluate your interaction with your immediate superior in terms of the following questions. Please read each of the questions carefully and judge the <u>degree</u> to which it is true to the interaction between the <u>two</u> of you. Select the number of your choice (given below) and put it to the left of the statement in the space provided.

```
+--------------------------------------+
| Very much          ... 7             |
| A good deal        ... 6             |
| Quite a bit        ... 5             |
| Somewhat           ... 4             |
| A little           ... 3             |
| Very little        ... 2             |
| Not at all         ... 1             |
+--------------------------------------+
```

-- (01P)   How much responsibility does he/she take for the jobs that are to be done jointly by you and him/her?

-- (02A)   How much do you interact with each other off the job?

-- (03A)   How much do you help each other in personal matters?

-- (04P)   How much is his/her contribution to the quantity of solutions on the jobs that are to be done together by you and him/her?

-- (05A)   How much advice do you seek from each other on personal problems?

-- (06P)   How efficient is his/her contribution on the jobs for which the two of you work together?

-- (07A) How much do you discuss your personal matters with each
          other?

-- (08P) How useful is his/her effort on the jobs that are to be
          done together by you and him/her?

-- (09A) How much importance do you attach to each other's
          advice on personal matters?

-- (10P) How much initiative does he/she take in solving the
          problems to be done together by you and him/her?

2 (INF). Below are described various ways of obtaining
information about how you go about changing the mind (or opinion)
of your <u>immediate</u> <u>superior</u> so that he/she agrees with you. Please
describe each statement, on a 7-point scale (given below), as to
how <u>frequently</u> you use it to influence him/her at work. Describe
the statements in terms of what you do, <u>not</u> what you would like
to do.

```
+-----------------------------------+
|  Never            ... 1           |
|  Almost never     ... 2           |
|  Seldom           ... 3           |
|  Sometimes        ... 4           |
|  Usually          ... 5           |
|  Almost always    ... 6           |
|  Always           ... 7           |
+-----------------------------------+
```

-- (01C) Call a staff meeting to back your request.

-- (02I) Praise him/her with superlatives.

-- (03I) Get your way by making him/her feel that it was his/her
          idea.

-- (04P) Repeatedly ask him/her until he/she gives in.

-- (05E) Offer an exchange of favor. .

-- (06E) Do personal favors for him/her.

-- (07I) Make him/her feel important.

-- (08C) Obtain informal support of higher ups.

-- (09R) Sometimes tell him/her the reasons for making the
          request.

-- (10E) Help him/her even in personal matters.

-- (11E) Remind him/her of past favors you did for him/her.

-- (12C) Bring some friends along to back your request.

-- (13I) Even when you know you would not use his/her advice, you consult him/her.

-- (14P) Repeatedly persuade him/her to comply with your arguments as they are the need of the time.

-- (15C) Get the support of some higher up to back your request.

-- (16R) Tell exactly why you need his/her help.

-- (17I) Use the words that make him/her feel good.

-- (18C) Get everyone else to agree with you before you make the request.

-- (19E) Remind him/her how hard you had worked and it would only be fair for him/her to help you now.

-- (20R) Tell him/her the reasons why your plan is the best.

-- (21C) Refer the matter to higher authority if the situation so demands.

-- (22R) Argue your points logically.

-- (23E) Offer some personal sacrifice in exchange (e.g., doing part of his/her or others' job, etc.).

-- (24P) Go on asking persistently till he/she does what you want.

SECTION VII -- OUTPUT

1 (SAT). Please indicate how <u>satisfied</u> you are on a 7-point scale with each of the following aspects of your job. Read each item carefully and put the number of your choice in the space provided to the left of the item.

Very dissatisfied	... 1
Dissatisfied	... 2
Slightly dissatisfied	... 3
Neutral	... 4
Slightly satisfied	... 5
Satisfied	... 6
Very satisfied	... 7

<u>HOW</u> <u>SATISFIED</u> <u>ARE</u> <u>YOU</u> <u>WITH</u>?

-- (01E)   The respect you receive from the people you work with.

-- (02E)   The amount of job security you have.

-- (03I)   The chances for advancement on your job.

-- (04I)   The feeling of worthwhile accomplishment you get from
            doing your job.

-- (05I)   The amount of challenge in your job.

-- (06E)   The friendliness of the people you work with.

-- (07I)   The amount of personal growth and development you get
            in doing you job.

2 (COM). Listed below are a series of statements that represent
possible feelings that individuals might have for organizations
for which they work. With respect to your own feelings about the
particular organization for which you are now working, please
indicate the degree of your <u>agreement</u> <u>or</u> <u>disagreement</u> with each
statement.

      Write the number of your choice in the blank beside each
statement, based on the following scale.

```
┌─────────────────────────────────────────────┐
│  Strongly disagree          ... 1            │
│  Moderately disagree        ... 2            │
│  Slightly disagree          ... 3            │
│  Neither agree nor disagree  ... 4           │
│  Slightly agree             ... 5            │
│  Moderately agree           ... 6            │
│  Strongly agree             ... 7            │
└─────────────────────────────────────────────┘
```

-- (1)   I am willing to put in a great deal of effort beyond
           that   normally expected in order to   help   this
           organization be successful.

-- (2)   I talk up this organization to my friends as a great
           organization to work for.

-- (3)   I would accept almost any type of job assignment in
           order to keep working for this organization.

-- (4)   I find that my values and organization's values are
           very similar.

-- (5)   I am proud to tell others that I am a part of this organization.

-- (6)   I could just as well be working for a different organization as long as the type of work were similar.

-- (7)   This organization really inspires the very best in me in the way of job performance.

-- (8)   Often, I find it difficult to agree with this organization's policies on important matters relating to its employees.

-- (9)   I really care about the fate of this organization.

3 (EF).   Every worker produces something in his/her work. It may be a "product" or a "service". We would like you to think carefully of the things that you produce in your work and of the things produced by those people who work around you in your division.

1.   Thinking now of the various things produced by the people you know in your division, how much are they producing? CHECK ONE:

    -- (1)   Their production is very high

    -- (2)   It is fairly high

    -- (3)   It is neither high nor low

    -- (4)   It is fairly low

    -- (5)   It is very low.

2.   How good would you say is the quality of the products or service produced by the people you know in your division? CHECK ONE:

    -- (1)   Their products or services are of excellent quality

    -- (2)   Good quality

    -- (3)   Fair quality

    -- (4)   Their quality is not too good

    -- (5)   Their quality is poor.

3. Do the people in your division seem to get maximum output from the resources (money, people, equipment, etc.) they have available? That is, how efficiently do they do their work? CHECK ONE:

-- (1) They do not work efficiently at all

-- (2) Not too efficient

-- (3) Fairly efficient

-- (4) They are very efficient

-- (5) They are extremely efficient.

4. How good a job is done by the people in your division in anticipating problems that may come up in the future and preventing them from occurring or minimizing their effects? CHECK ONE:

-- (1) They do an excellent job in anticipating problems

-- (2) They do a very good job

-- (3) A fair job

-- (4) Not too good a job

-- (5) They do a poor job in anticipating problems.

5. From time to time newer ways are discovered to organize work, and newer equipment and techniques are found with which to do the work. How good a job do the people in your division do at keeping up with these changes that could affect the way they do their work? CHECK ONE:

-- (1) They do a poor job of keeping up-to-date

-- (2) Not too good a job

-- (3) A fair job

-- (4) They do a good job

-- (5) They do an excellent job of keeping up-to-date.

6. When changes are made in the routines or equipment, how quickly do the people in your division accept and adjust to these changes? CHECK ONE :

-- (1)   Most people accept and adjust to them immediately

-- (2)   They adjust very rapidly, but not immediately

-- (3)   Fairly rapidly

-- (4)   Rather slowly

-- (5)   Most people accept and adjust to them very slowly.

7.   What proportion of the people in your division readily accept and adjust to these changes? CHECK ONE:

-- (1)   Considerably less than half of the people accept and adjust to these changes readily

-- (2)   Slightly less than half do

-- (3)   The majority do

-- (4)   Considerably more than half do

-- (5)   Practically everyone accepts and adjusts to those changes readily.

8.   From time to time emergencies arise, such as crash programs, schedules moved ahead, or a breakdown in the flow of work occurs. When these emergencies occur, they cause work overloads for many people. Some work groups cope with these emergencies more readily and successfully than others. How good a job do the people in your division do at coping with these situations? CHECK ONE:

-- (1)   They do a poor job of handling emergency situations

-- (2)   They do not do very well

-- (3)   They do a fair job

-- (4)   They do a good job

-- (5)   They do an excellent job of handling these situations.

Once again thank you for your help.